



# **DEPARTMENT OF DEFENSE**

## **OFFICE OF THE SECRETARY OF DEFENSE COMPARATIVE TESTING OFFICE HANDBOOK**

**THE DEPUTY UNDER SECRETARY OF DEFENSE  
(ADVANCED SYSTEMS AND CONCEPTS)**

**DECEMBER 2007**

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## FOREWORD

The Comparative Testing Office (CTO) provides oversight direction to the Foreign Comparative Testing (FCT) Program, the Defense Acquisition Challenge (DAC) Program and other projects as assigned by the Office of Secretary of Defense (OSD).

Congressionally authorized in 1989 by Title 10, U.S. Code, Section 2350a(g), the FCT Program supports U.S. policy of encouraging international armaments cooperation and helps reduce overall DoD acquisition costs by funding the testing of foreign non-developmental items, commercial-off-the-shelf items, or those items in the late state of the development process, which demonstrate the potential to satisfy user requirements.

Similarly DAC, authorized by Title 10, U.S. Code, Sec 2359b, provides opportunities for the increased introduction of innovative and cost-saving technology in DoD acquisition programs. To this end, the DAC provides any person or activity within or outside the DoD an opportunity to submit proposals that would improve the performance, affordability, manufacturability, or operational capability at the component, subsystem, or system level of an existing DoD acquisition program.

DAC and FCT Programs strive to equip the warfighter with world-class military equipment; however, legislation strictly limits the FCT Program's funding to the test and evaluation of foreign items only. Both DAC and FCT activities are authorized to begin and operate without formal Joint Requirements Oversight Council (JROC) review and may waive OSD and Department of Test and Evaluation (DOT&E) requirements in the best interest of rapidly fielding equipment to the warfighter.

The purpose of this handbook is to help readers understand how to manage a DAC or FCT project successfully, from initial nomination through eventual procurement. This handbook describes in plain language the processes to be used those participating in the DAC and FCT Programs.

Colonel Bob Mattes, USAF  
Director, Comparative Testing Office  
Office of the Deputy Undersecretary of Defense  
(Advanced Systems and Concepts)

COMPARATIVE TESTING OFFICE  
PROCEDURES HANDBOOK  
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## REFERENCES

- a. DoD Instruction 5000.2, "Operation of the Defense Acquisition System," May 5, 2003
- b. Title 10, U.S. Code, Section 2350a(g)
- c. Title 10, U.S. Code, Section 2359b

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## FREQUENTLY USED ACRONYMS

### **A**

AMC	Army Materiel Command
APB	Acquisition Program Baseline
ACTD	Advanced Concept Technology Demonstration
ARA	Acquisition Resources Analysis
AT&L	Acquisition, Technology, and Logistics
AS&C	Advanced Systems and Concepts

### **B**

BAA	Broad Area Announcement
BIDS	Broad Area Announcement Information Distribution System

### **C**

CDD	Capabilities Development Document
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
CAE	Component Acquisition Executive
CBD	Chemical Biological Defense
CINC	Commander in Chief
CNO	Chief of Naval Operations
CO	Contracting Officer
COTS	Commercial Off-the-Shelf
CRA	Command Resolution Authority
CSP	Cost Schedule & Performance
CTO	Comparative Testing Office

### **D**

DAC	Defense Acquisition Challenge Program
DAO	Defense Attaché Office
DCMA	Defense Contract Management Agency
DCMAI	Defense Contract Management Agency International
DCO	Defense Cooperation Office
DEA	Data Exchange Agreement
DFAS	Defense Finance and Accounting Service
DoD	Department of Defense
DoDD	Department of Defense Directive
DOT&E	Department of Test and Evaluation
DUSD	Deputy Undersecretary of Defense

### **F**

(FAR)	Federal Acquisition Regulations
FedBizOpps	Federal Business Opportunities
FCT	Foreign Comparative Testing
FY	Fiscal Year
FYDP	Future Year Defense Plan

### **G**

GWOT	Global War on Terror
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### **I**

IDIQ	Indefinite Delivery Indefinite Quantity
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ICP	Initial Capabilities Document
IPR	Intellectual Property Rights
IEA	Information Exchange Agreement
IPT	Integrated Product Team
ITOP	International Test Operations Procedures
<b>J</b>	
J8	Force Structure, Resources, and Assessment Directorate, Joint Staff
JCTD	Joint Concept Technology Demonstration
JROC	Joint Requirements Oversight Council
JPEO	Joint Program Executive Officer
<b>L</b>	
LOE	Letters of Endorsement
<b>M</b>	
MAIS	Major Automated Information Systems
MCCDC	Marine Corps Combatant Development Command
MDAP	Major Defense Acquisition Program
MNS	Mission Needs Statement
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
<b>O</b>	
O&M	Operations and Maintenance
ODC	Office of Defense Cooperation
ORD	Operational Requirements Document
O&S	Operations and Support
OSD	Office of the Secretary of Defense
<b>P</b>	
PE	Program Element
PEM	Program Element Monitor
PEO	Program Executive Office
PM	Project Manager
POC	Point of Contact
POR	Program of Record
<b>R</b>	
R&D	Research and Development
RDECOM	Research, Development, Engineering Command (US ARMY)
RDT&E	Research, Development, Test, and Evaluation
ROI	Return on Investment
<b>S</b>	
SAE	Service Acquisition Executive
SECDEF	Secretary of Defense
SES	Senior Executive Service
SME	Subject Matter Expert
SPO	Systems Program office
SYSCOM	Systems Command

**T**

T&E	Test and Evaluation
TEMP	Test and Evaluation Master Plan
TRDP	Technical Research and Development Program
TRL	Technology Readiness Level

**U**

USAF	U.S. Air Force
USSOCOM	U.S. Special Operations Command



## CHAPTER 1

### PURPOSE AND ORGANIZATION OF THE HANDBOOK

C1.1. PURPOSE OF THE HANDBOOK. The purpose of this handbook is to provide a ready reference for both the Foreign Comparative Testing (FCT) Program and the Defense Acquisition Challenge (DAC) Program detailing how to successfully initiate and manage a DAC or FCT project from proposal initiation through project close-out and procurement.

C1.1.1. Organizations involved in the DAC and FCT Programs include the Department of Defense (DoD), domestic and foreign government organizations, and industry. Because of this diversity, the handbook addresses a variety of issues associated with the DAC and FCT Programs.

C1.2. HANDBOOK LAYOUT. The handbook is written to guide a project manager (PM) or another submitter from project inception to completion. Chapters and appendices cover the major actions and personal responsibilities to accomplish a successful DAC or FCT project.

C1.2.1. The Table of Contents directs the reader to the chapter and section that address particular questions or concerns. Additional or clarifying information may be found on the CTO homepage on the World Wide Web at <http://www.acq.osd.mil/cto> . For additional questions, the reader should contact the Service CTOs (Army, Navy/Marine Corps, Air Force, or U.S. Special Operations Command), or OSD CTO. Note: references to Services CTO in this handbook include USSOCOM.

C1.2.2. Chapter 2 provides overviews of the DAC and FCT Programs.

C1.2.3. Chapter 3 describes the OSD CTO proposal process and addresses the issues for industry and government persons contemplating the DAC and FCT Programs. This chapter identifies and describes the areas critical to gaining project approval. A thorough understanding of this chapter will assist a submitter in writing and submitting a competitive proposal.

C1.2.4. Chapter 4 addresses methods and techniques for success in managing an approved DAC or FCT project. It explains OSD expectations in the project areas of cost, schedule, performance, testing, and evaluation. This chapter should serve to stimulate cost-effective testing and evaluation approaches.

C1.2.5. Chapter 5 focuses on project closeout and follow-on procurement, the ultimate goal of the DAC and FCT Programs. Specifically, the FCT Program's goal is to streamline the acquisition process, allowing rapid fielding and deployment of world-class items that were successfully tested against requirements. The ultimate goal for DAC is to implement innovative technologies that offer significant improvements in performance, affordability, manufacturability, or operational capability for an existing acquisition program.

C1.2.6. The Appendices contain specialized charts and examples of the required documentation and reports.

### C1.3. CONTACT INFORMATION.

Comparative Testing Office  
1851 South Bell Street  
Crystal Mall 3, Suite 101  
Arlington, VA 22202

Phone (703) 602-3740  
DSN 332-3740  
Fax (703) 602-3748

E-mail FCT@osd.mil or DefenseChallenge@osd.mil

#### Or to:

Comparative Testing Office  
3090 Defense Pentagon  
Room 3E130  
Washington, DC 20301-3090

Information on the DAC and FCT Program, this handbook, and links to other helpful sites are available through the World Wide Web on the OSD CTO homepage at:  
<http://www.acq.osd.mil/cto>.

## CHAPTER 2

### CTO OVERVIEW

C2.1. CTO OVERVIEW. The Comparative Testing Office is administered under the Deputy Under Secretary of Defense for Advanced Systems and Concepts (DUSD AS&C). CTO has responsibility over both the Defense Acquisition Challenge (DAC) Program and the Foreign Comparative Testing (FCT) Program. See Table C2.T1. CTO Organization below.

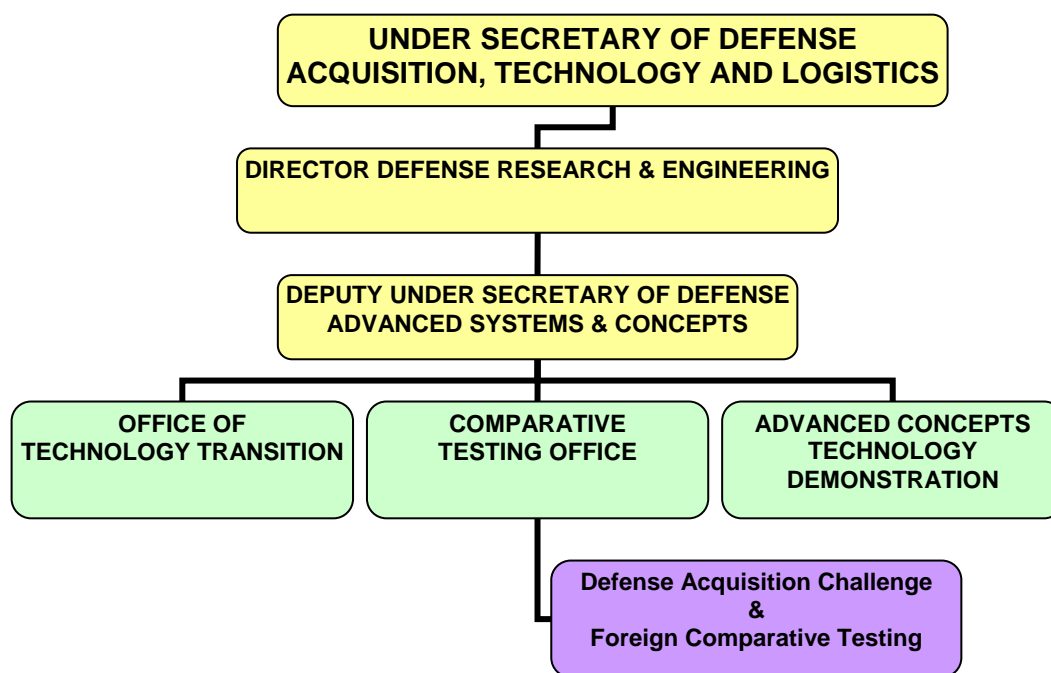


Table C2.T1. CTO Organization

C2.1.1. Each Military Department/Service has one or more offices that manage their respective DAC and FCT Programs and report to CTO for programmatic and funding functions. Each Military Department/Service has legislative authority for equipping their warfighters. Since the goal of both DAC and FCT Programs is to find and test the best equipment for our warfighters, the Department/Services are integral partners.

C2.2. DAC PROGRAM. The DAC Program provides opportunities for both innovators and the Department of Defense (DoD). For innovators, it means faster entry to the defense acquisition system. For the DoD program managers (PMs), it means increased technology insertions to improve systems.

C2.2.1. Technological developments and capability gaps are growing faster than ever before. Yet the defense programming and budgeting process cannot always keep up. On the supply side, many of America's companies generating technological innovations have found it difficult to break into the defense market, especially those classified as small U.S. businesses. In an effort to remedy the technology-to-programming lag, the DAC Program, authorized by Title 10, USC, Sec 2359b and the 2003 National Defense Authorization Act, provides opportunities

for the increased introduction of innovative and cost-saving commercial technologies or products into existing DoD acquisition programs. DAC provides any person or activity within or outside the DoD the opportunity to propose to an existing DoD program alternatives, known as Challenge Proposals, that could result in improvements in performance, affordability, manufacturability, or operational capability of the systems acquired by that program. The DAC Homepage on the World Wide Web contains additional information and may be found at <https://cto.acqcenter.com/osd/portal.nsf>.

**C2.3. FCT PROGRAM.** The mission of the FCT Program is to test items and technologies of our allies and other friendly nations that have a high Technology Readiness Level (TRL) in order to satisfy valid defense requirements more quickly and economically. In fulfilling this mission, FCT continues to be a uniquely successful acquisition tool from a U.S. government-to-foreign industry standpoint. From 1980 to 2007, the FCT Program has helped to foster the two-way street in defense spending between the United States and its allies. At the same time, the program has reaped substantial savings by avoiding research and development costs, lowering procurement costs, reducing risk for major acquisition programs, and accelerating the fielding of equipment critical to the readiness and safety of U.S. operating forces. While the aim of the FCT Program is to improve the U.S. Armed Forces' operational performance, leveraging of foreign research and development has benefited the U.S. taxpayer. Additionally, the FCT Program has served as a catalyst for industry teaming arrangements, which have been productive for both U.S. and foreign industries in an increasingly competitive global market, helping to build a robust U.S. defense industrial base.

C2.3.1. Foreign items are nominated by a sponsoring organization within the DoD Government Program Office for testing in order to determine whether the items satisfy U.S. military requirements or address mission area shortcomings. The CTO funds testing and evaluation; the Services fund all procurements that result from a successful test. The FCT Homepage on the World Wide Web contains additional information and may be found at <https://cto.acqcenter.com/osd/portal.nsf>.

**C2.4. CATEGORIES OF PROJECTS.** The DAC and FCT Programs focus on projects where an intent to procure after the assessment phase exists. This includes both qualification and comparative testing.

C2.4.1. A qualification test is one in which a single, unique item is evaluated against a set of requirements or an existing item to determine if the equipment's capabilities meet the requirement.

C2.4.2. Under a comparative test, multiple items are tested simultaneously and evaluated against each other and against a set of requirements.

**C2.5. FUNDING SCOPE.** DAC is targeted primarily on funding the test and evaluation of technologies or items submitted by U.S. vendors. FCT Program funds are restricted by law for testing of foreign items. FCT funding can be used for the entire cost of the test of the foreign items (including lease or purchase of test articles and execution of the test and evaluation). Costs associated with testing a U.S. competitor must be borne by the respective acquisition program office/Service sponsor. The amount of sponsor funding contribution for testing and evaluation is an evaluation criterion for project selection.

**C2.6. AUTHORITY AND POLICY.**

C2.6.1. DAC is authorized under Title 10, United States Code, Section 2359(b). DAC was established in Fiscal Year (FY) 2003 as a sub-element under the Quick Reaction Special

Projects Program Element. In FY2005, Congress directed DoD to create a new BA5 RDT&E Program Element 0604051D8Z specifically for DAC.

C2.6.2. FCT is authorized under Title 10, U.S. Code Section 2350a(g), and is funded through Program Element 0605130D in the Defense-wide Research Development Test and Evaluation (RDT&E) 0400 Budget. FCT was Congressionally authorized in 1989.

C2.7. PROGRAM OBJECTIVES. The DAC and FCT Program objectives are to improve the U.S. warfighter's capabilities and reduce expenditures through:

1. Rapidly fielding quality military equipment
2. Eliminating unnecessary duplication of research, development, test, and evaluation
3. Reducing life cycle or procurement costs
4. Enhancing standardization and interoperability
5. Promoting competition by qualifying alternative sources
6. Improving the U.S. military industrial base

C2.7.1. In keeping with overall DoD goals for efficiency and proven management techniques, the DAC and FCT Programs adhere to the following principles:

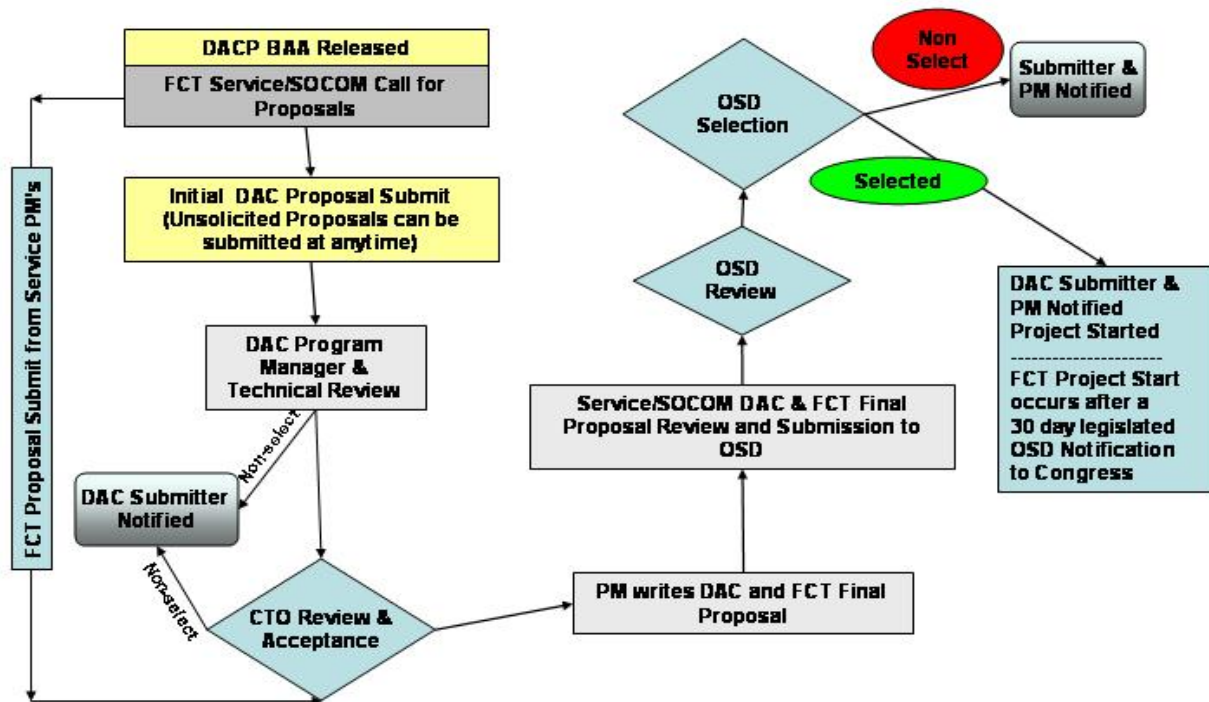
1. Focus on implementation and procurement, since CTO is an acquisition-oriented office
2. Involve the warfighter/user from the beginning of each project
3. Utilize the Integrated Product Team (IPT) concept to manage a project from inception to completion
4. Fund projects with a user advocate, a documented requirement, a thorough market survey, a cost-effective test plan, and a high probability of implementation/procurement after a successful evaluation
5. Hold the sponsoring organizations accountable for project management and project execution

C2.7.2. The DAC and FCT Programs are just two of the many tools in the acquisition manager's toolbox. The decision to use DAC or FCT rests with the sponsoring organization in the Services. The key to success is planning. The sponsoring organization must develop a detailed plan for overall project execution, from testing to implementation/procurement.

## CHAPTER 3 THE PROPOSAL PROCESS

1. **C3.1. PROPOSAL PROCESS OVERVIEW.** Both DAC and FCT have similar proposal submission and evaluation processes. Both begin with the identification of a DAC or FCT item to be tested, the subsequent submission of a draft proposal, followed by the final proposal phase, and finishing up with project selection.

Table C3.T1. CTO Annual Process Diagram



**C3.2. IDENTIFYING A DAC OR FCT PROPOSAL ITEM.** The CTO proposal process starts with the identification of an item or an innovative technology that may have potential for the U.S. military to fulfill a validated requirement or an operational shortfall, or to improve a system capability. Often vendors with a world-class or innovative technology will introduce or advertise their product directly to a program office, Service CTO, or the OSD CTO. In these cases, the PM, Service CTO representative, or the OSD CTO representative will work with the vendor, reviewing the proposed item for potential and technical merit and guiding the vendor through the proposal process. In other instances, the PM may have identified a potential item that could benefit his or her acquisition program of record (POR) through market surveys or trade shows. Also, OSD and Service CTO representatives conduct industry tours to foreign countries and domestic trade shows to search actively for potential FCT and DAC candidates.

C3.2.1. Potential DAC or FCT items are identified by a number of other methods:

1. Market Investigations (such as Requests For Information, Sources Sought Notices, or Broad Agency Announcements)

2. Vendor marketing
3. U.S. military user observation of the item in use; for example, during coalition operations and exercises, or an in-country U.S. representative observation of the host nation's military using the item
4. Observation of a foreign item or state-of-the-art technology at military conventions, conferences, or industrial trade shows
5. Targeted searches for materiel to satisfy urgent military requirements
6. Vendor demonstrations to military users and materiel acquisition professionals in the DoD
7. Identification of potential foreign vendors by U.S. representatives overseas, such as the Offices of Defense Cooperation, U.S. Air Force Liaison Offices, and Army Research, Development and Standardization Groups

**C3.3. DRAFT PROPOSAL STAGE.** After the identification of potential DAC and FCT project items, the next step is to submit a draft proposal through the BIDS eBusiness tool at <https://cto.acqcenter.com/osd/portal.nsf>. Both vendors and PMs need to register and submit draft proposals for evaluation through this web portal. Submitters are also required to submit a quad chart (less than 500 mega bytes), which is a single PowerPoint slide depicting a summary of the proposed item or technology, a picture or diagram, participants, contact information, funding requested, and benefits/cost avoidance. The proposal and quad chart templates are available on the website, and the format can be seen at Appendices 2 and 9 respectively.

C3.3.1. The FCT Program relies on the Service CTO representatives and their acquisition program managers for identifying candidates and submitting a proposal in BIDS.

C3.3.2. DAC formally advertises for draft proposals through the release of the DoD-issued Broad Agency Announcement (BAA) in the Federal Business Opportunities (FedBizOpps). The BAA requests proposed rapid improvements to existing acquisition programs, at the component, subsystem, or system levels. FedBizOpps, with information on its use, is available on the World Wide Web at <http://www.FedBizOpps.gov/>. This ensures the widest dissemination possible to industry and is consistent with DAC legislation. The thoroughness and accuracy of the draft proposal provides a foundation for a successful project. Although anyone can submit a draft proposal in BIDS, a successful draft proposal (one that is accepted for development into a final proposal) is often the collaborative product resulting from open dialogue between the users, the vendors, the PEOs, the PMs, and the other Service CTO representatives to match an item with warfighter requirements.

C3.3.3. For both the DAC and the FCT Programs, coordination by the Service CTO representatives with the other Service CTO representatives is encouraged throughout the proposal submission process. During the draft proposal stage, Service CTO representatives can assist submitters in correct formatting and necessary inclusion of required information.

C3.3.4. After the draft proposal documents have been submitted into BIDS, the subsequent review process for DAC proposals diverges from that for the FCT proposals. Congressional legislation requires DAC proposals to undergo a specified review process.

C3.3.5. DAC Proposal Service Administrative Review. The first step in this draft proposal review phase is the Service Administrative Review, in which Service CTO representatives check proposals for correct format, completeness, and a determination of whether the proposal is within the scope of DAC program. When deficiencies are found, the submitter is notified on how to revise the proposal and given the opportunity to correct deficiencies. If the proposal is determined to be outside the scope of DAC, the submitter will be referred to other DoD programs when applicable. It is important to note here that protection of intellectual property rights (IPR) is considered throughout the process, and each reviewer/evaluator must sign a Non-Disclosure Agreement and a Conflict of Interest statement



prior to being granted access to BIDS.

All proposals must identify a sponsoring POR and a PM to conduct the testing. While some DAC proposals originate from PM's who know the Service acquisition system, many are submitted directly by the vendor without any initial coordination with government program offices. When possible, the Service and OSD Comparative Testing Offices will help in matching proposals to the appropriate existing POR for consideration and evaluation by the respective PMs. Ground work done by a vendor early on to identify a POR and PM is beneficial.

**C3.3.6. DAC Technical Review and PM/PEO Review.** Once a proposal passes the Service Administrative Review, the next steps are the DAC technical review and PM/PEO review, which can be conducted concurrently. For the technical review, Service CTO representatives assign technical subject matter experts (SMEs) to evaluate each proposal for technical merit and feasibility. For the PM/PEO review, the Service CTO assigns the matched or sponsoring PM to evaluate the technical merit of the proposal as well as to determine the implementation or procurement potential of the proposed technology or item into the POR. To successfully pass the technical review and PM/PEO review stage, both the PM and at least one of the technical SMEs must approve/accept the submission. Additionally, the PM must agree to sponsor/accept the submission, then and write and submit the final proposal.

**C3.3.7. Draft FCT Proposal Review.** As mentioned earlier, a government PM submits FCT proposals. PM's are highly encouraged to work closely with Service CTO representatives prior to draft proposal submission into BIDS (<https://cto.acqcenter.com/osd/portal.nsf>). Once the proposal is submitted into BIDS, the process requires review and acceptance by Service CTO's for the proposal to move to the final proposal stage. If a proposal does not meet the Service CTO's specific requirements or priorities, it may be rejected.

**C3.4. FINAL PROPOSAL STAGE.** When the draft proposal package is complete and acceptable, the Service CTO directs the proposal to the sponsoring acquisition Program of Record's PM for development of the final proposal package. At this stage, the DAC draft proposal process and FCT draft proposal process re-converge. At the beginning of this stage, it is advised that the PM compile a preliminary Integrated Product Team (IPT) membership list, to include at least the vendor(s) representative(s), user advocate(s), and the Service CTO representative. This team can help the PM in gathering information needed for the final proposal.

**C3.4.1. Writing the Final Proposal.** The PM is responsible for the final proposal – determining what funding is needed start-to-finish and developing preliminary pass/fail criteria and test plan, acquisition/transition strategy, and letters of endorsement (LOE) indicating support for the technology and intent to transition the technology after a successful test. Additionally, planning for each certification required for inserting the new technology into existing acquisition programs should also be considered (examples include: safety, weapons stores clearance, and hazard classification determination). In developing the final proposal, the PM and the appropriate Service CTO representatives should also consider the evaluation criteria on which the proposal will be judged. These evaluation criteria are discussed later in the chapter in paragraph c3.7.

**C3.4.2. Market Investigation.** The PM should consider a market investigation to meet Federal Acquisition Regulations (FAR) for fair and open competition. This investigation ensures that all known viable contenders (both domestic and foreign) are being considered and reduces challenges/protests to the acquisition of production articles after a successful test. A sole-source justification and authorization is available for unique or special items.

**C3.4.3. Letters of Endorsement.** Although funded under AT&L with RDT&E funding



(two-year money), both DAC and FCT are procurement programs and the expected outcome of a DAC or FCT funded project, should they test successfully, is procurement and fielding of the item. To signify Service intent to procure production items, we require a flag-level or program director letter(s) of support indicating that the item will be procured or implemented should it test successfully. If procurement funding is not currently programmed and the lead-time is sufficient, a program objective memorandum (POM) request will be adequate to show support for implementation. In any case, the flag-level or program director support must be from an official who has decision authority to commit POR funds.

**C3.4.4. Project Chart.** In addition to writing the final proposal and refining the quad chart submitted in the draft proposal stage, the PM must also construct a project chart that depicts key project activities and projected funding outlays by fiscal year (the project chart template is available in AP6). DAC and FCT test phases are based on decision points tied to pass/fail criteria, which are required in the final proposal.

**C3.4.5. Acquisition and Contracting Strategy.** The sponsoring organizations should, if possible, structure their acquisition and contracting strategies so there is a single contract award to obtain the test articles and options for the first lot of production articles. An acquisition strategy commonly referred to as the “Kaminski Approach,” is the allowance of production options in the basic test contract. This strategy was developed and approved during the term of Dr. Paul Kaminski, former Under Secretary of Defense (Acquisition & Technology). With such an acquisition and contracting strategy, the PM can proceed directly from successful test to implementation or procurement. The complete one-page memo may be found in Appendix 8. Briefly summarized:

1. The intent to initiate a DAC or FCT project followed by implementation/procurement should be publicized in the FedBizOpps, allowing full and open competition.
2. Sources responding to the announcement should be provided a solicitation that calls for proposals to include test article prices and priced options for production quantities.
3. Procuring activities may, without further competition and on the basis of the solicitation and the proposal, contract for production of the successful test article.

**C3.4.6. Submitting the Final Proposal.** Once the PM has fully developed the final proposal, the quad chart, project chart, and letters of endorsement, the PM submits the final proposal package in BIDS (<https://cto.acqcenter.com/osd/portal.nsf>), which makes it available for the final stage in the proposal submission process: project selection.

**C3.5. PROJECT SELECTION.** After receipt of the final proposal package, Service CTO representatives conduct an internal review within their specific Service. This review is a final vetting at the Service level. With the help of Service senior leadership, the final proposals are prioritized and then submitted to OSD for funding consideration/project selection.

**C3.5.1. OSD Review.** After the Service CTO representatives submit their selected proposals for OSD funding consideration in BIDS, OSD CTO conducts the OSD Review. In this phase the final proposal is independently reviewed by CTO representatives and a SME against the established evaluation criteria. The SME analyst may or may not be within the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD, AT&L). Protection of intellectual property rights is considered throughout the review process and each analyst/reviewer must sign a Non-Disclosure Agreement and a Conflict of Interest statement prior to gaining access to BIDS. Additionally, Defense Acquisition Challenge proposals that specifically address solutions for acquisition programs experiencing a Nunn-McCurdy breach will be given special consideration if they address the reason for the breach and satisfy all other legislative requirements identified in Title 10. After considering Service CTO priorities and OSD

CTO Analyst/OSD SME recommendations, Director, OSD CTO conducts his review and then ranks proposals for funding consideration.

DUSD, AS&C has the ultimate decision authority on the selection of proposals for funding. After careful review of the findings presented by Director, OSD CTO, the DUSD, AS&C approves a final priority listing of proposals selected for funding as projects. This step concludes the final proposal selection process.

Subsequent to final proposal selection for the FCT Program, OSD CTO prepares notification letters to be signed out by DUSD AT&L to Congress listing individual FCT proposals recommended for funding. At the end of the 30-day Congressional notification period, and if there have been no objections from Congress, the selections are approved. Subsequently, sponsoring organizations are notified of project approval and current fiscal year funding to be awarded for their FCT projects. No Congressional notification is required prior to funding DAC projects.

Once the OSD Comptroller releases fiscal year funding, OSD CTO directs funding to the selected projects through Service CTO representatives to the PM/PORs. The PM then puts funds on contract as required and the project is initiated. Most projects on average receive two years of OSD FCT or DAC funding. However, complex equipment or tests of sophisticated systems and some ammunition can be funded for longer periods. It is at this point of first funding that a proposal becomes a project and quarterly progress reporting is required.

**C3.6. SERVICE LEVEL RAPID PROPOSAL PROCESS.** The rapid proposal process provides for an expeditious FCT/DAC proposal approval for short-term projects (no more than 6-12 months long) for the Services to rapidly test, evaluate or qualify equipment for immediate use and deployment to military units for direct support of ongoing war fighting efforts (e.g., deployment to military area of operations or for the Global War on Terrorism)). In such a scenario, Services identify a product, source the funds from previously provided CTO funding, and prepare justification for approval to reallocate funds (among previously approved projects) within the respective Service. Services may add funds of its own to the project and conduct the project and/or request additional DAC or FCT CTO funding.

Table C.3.T2. Rapid Proposal Process Procedures/Timeline

Time/days	Step
D+1	Services identify product that may meet immediate need in warfighting operations and develop a proposal to provide to OSD CTO. Service also identifies source of funds, previously provided to that service, to fund the rapid response proposal. Services prepare a recommendation to reallocate the funds internally (among previously approved projects) within the respective service to provide a source of funds and provide recommendation on reallocation to OSD CTO.
D+10	Director OSD CTO and DUSD AS&C provide streamlined approval of the rapid response proposal.
D+10	OSD CTO submits notification to Congress for approval of FCT new start of the rapid response proposal.
D+10 to D+40	Congressional Notification/Approval (30 days) for FCT only; DAC projects can begin at this point. Service conducts planning to execute project. Funds reallocated and contract negotiated.
D+40	OSD CTO provides official project approval to service and the project initiated by Service with contracting officer's signature.
D+40 to D+220	Project conducted.
NLT D+360	Target project completion date with procurement decision.

**C3.7. PROPOSAL FORM DESCRIPTION.** The specific evaluation criteria shown in Table C3.T3. has been developed over the 20-year history of the FCT program and are used by proposal evaluators/reviewers to determine if a proposal has merit as a DAC or FCT project. Proposals that score well against all of the criteria listed below have the best chance of selection as projects.

Table C3.T3. CTO Proposal Evaluation Criteria (Also see Appendix 3)

1. Project Description
2. Current Technology Readiness Level
3. Benefit to the Warfighter
4. Cost Avoidance
5. Intellectual Property Rights
6. Valid Requirement
7. Market Investigation
8. Project Schedule
9. Procurement Potential
10. Acquisition Strategy
11. Letter of Endorsement

**C3.7.1. Proposal Section 1 - Proposal Information.** The DAC and FCT Programs share a common proposal format. The information provided in this section determines which Service is assigned primary responsibility for reviewing your proposal. Under this area we want:

1. Type of proposal – whether FCT or DAC
2. Title – a short descriptive name
3. Service – primary user of item
4. Whether this has joint application – e.g. Army and Marine Corps tanks
5. Submitter Information
6. Government PM or if unknown put Service FCT/DAC focal point
7. Government POR this proposal applies to

**C3.7.2. Proposal Section 2 - Project Description.** This area includes:

1. A concise, two-sentence description of the product and what the warfighter can do better.
2. A challenge summary, for DAC proposals only. Describe how the proposed technology, component, system, subsystem, process, or product challenges or improves upon something existing or planned in a current DoD acquisition program.
3. Deliverable. What is the intended deliverable for this proposed project? Keep in mind both DAC and FCT are procurement programs with the goal of transitioning items to the warfighter.
4. Pass/Fail Criteria. Please list key performance criteria that must be met in order to claim successful demonstration of fulfillment of requirements if known (must include in final proposal).

**C3.7.3. Proposal Section 3 - Candidate Items to be Tested.** The DAC and FCT Programs' focus is on testing and evaluating non-developmental and near-non-developmental items. Under the DAC and FCT Program, non-developmental items are those that are already developed and have potential military application without major modifications. The item may be in commercial or military use.

C3.7.3.1. OSD CTO gauges the development status of DAC and FCT proposals through the use of Technology Readiness Level (TRL) ratings at the projected testing time. The DAC and FCT Programs seek proposals with a TRL greater than or equal to 7, endorsing items entering production with little or no modification needed.

C3.7.3.2. A question that normally surfaces during the review and selection process is whether an article proposed for DAC or FCT evaluation is already fielded. An item in use demonstrates the viability of the item and may provide real data that may reduce the time and cost in our U.S. evaluation of the item. The proposal should also address interoperability and support considerations (e.g., is the item or system in, or about to enter into, service with one or more allies or friendly countries?).

Table C3.T4. Technology Readiness Level (TRL) Definitions

TRL	Description
1. Basic principles observed and reported.	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties.
2. Technology concept and/or application formulated	Invention begins. Once basic principles are observed, practical applications can be invented. The application is speculative and there is no proof or detailed analysis to support the assumption. Examples are still limited to paper studies.
3. Analytical and experimental critical function and/or characteristic proof of concept.	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
4. Component and/or breadboard validation in laboratory environment.	Basic technological components are integrated to establish that the pieces will work together. This is relatively "low fidelity" compared to the eventual system. Examples include integration of "ad hoc" hardware in a laboratory.
5. Component and/or breadboard validation in relevant environment.	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so that the technology can be tested in a simulated environment. Examples include "high fidelity" laboratory integration of components.
6. System/subsystem model or prototype demonstration in a relevant environment.	Representative model or prototype system, which is well beyond the breadboard tested for TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high fidelity laboratory environment or in simulated operational environment.
7. System prototype demonstration in an operational environment	Prototype near or at planned operational system. Represents a major step up from TRL 6, requiring the demonstration of an actual system prototype in an operational environment with representatives of the intended user organization(s). Examples include testing the prototype in structured or actual field use.
8. Actual system completed and operationally qualified through test and demonstration.	Technology has been proven to work in its final form and under expected operational conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended or pre-production configuration to determine if it meets design specifications and operational suitability.
9. Actual system, proven through successful mission operations.	Actual application of the technology in its production configuration and under mission conditions, such as those encountered in operational test and evaluation. In almost all cases, this is the end of the last "bug fixing" aspects of true system development. Examples include using the system by operational users under operational mission conditions.

C3.7.4. Proposal Section 4 - Benefit to the Warfighter. The DAC and FCT Programs focus on providing increased capability to the warfighter. The DAC and FCT project description must accurately portray, at the minimum, moderate and immediate benefits to the warfighter. Most DAC and FCT projects result in an operational benefit to the warfighter, either increased combat readiness/effectiveness or improved performance. The proposal should thoroughly discuss how the item or technology positively impacts the warfighter/user. It is important to consider such merits as operational capability, affordability, manufacturability, or improved performance, at the component, subsystem, or system level of a POR. Additionally, a discussion of potential reduction in fielding time length using the traditional procurement process should be included. Usually an item already in production can be fielded with the Armed Forces much more readily than one in early stages of development. An estimate of the time saved helps one quantify the benefit of a DAC or FCT project.

C3.7.5. Proposal Section 5 - Cost Avoidance. The DAC and FCT Programs strive to gain identifiable cost, schedule, and performance (CSP) and return on investment (ROI) advantages for DoD. In this estimate, it is important to consider all sources of cost avoidance cited in the proposal, as well as sponsor contribution of funding to the total project cost when determining CSP/ROI.

C3.7.5.1. U.S. Research, Development, Testing, and Evaluation (RDT&E) Cost Avoidance. Every DAC and FCT project that leads to production procurement has the advantage of avoiding possible RDT&E costs of U.S. military sponsorship of the development. Estimating the RDT&E cost avoidance can be accomplished by several methods, including: determining cost to fund a similar U.S. developmental project in the past, asking the vendor how much was spent in developing the product, or using cost-estimating relationships.

C3.7.5.2. Manufacturing Cost Avoidance. In some cases, a DAC or FCT project may validate a new or improved manufacturing process that may lead to significant cost savings. The specific focus of the project may be the testing of the actual manufacturing process itself, which would have direct manufacturing cost avoidance, or the testing of a new or improved item that is created via a different manufacturing process, which would have indirect manufacturing cost avoidance.

C3.7.5.3. Procurement Cost Avoidance. The items of focus during a DAC or FCT project can sometimes be less expensive per unit than items that are currently in the inventory. These unit cost savings should be estimated.

C3.7.5.4. Operations and Support Life-Cycle Cost Avoidance. Many DAC and FCT projects result in reduced life-cycle costs for an end item. The proposal submitter should estimate the number of years the item/technology will be in use following procurement. Equipment nearing the end of its service life must be considered before proposing a project.

C3.7.6. Proposal Section 6 - Intellectual Property Rights. The DAC and FCT Programs consider the necessity of protecting vendor-specific intellectual property rights (IPR). Within the DAC and FCT proposal review process, CTO goes to great lengths to ensure protection of IPR. However, certain requirements exist in order to enable proper testing and evaluation, which may necessitate negotiations on acceptable IPR restrictions and costs. The DAC and FCT Programs seek proposals that do not contain IPR restrictions and costs, but will accept those with reasonable restrictions and costs, particularly when the production is licensed to a U.S. producer.

C3.7.7. Proposal Section 7 - Requirement/Justification. A validated requirement is critical to any implementation or procurement after a successful test. Vendors wishing to make informed business decisions concerning a DAC or FCT project should understand the importance of the relationship between validated requirements to potential sales. Requirements are normally in the form of a mission needs statement, an operational requirements document, an initial capabilities document, or a capabilities development document. In unique cases, an urgent need can be documented in a letter from a requirements authority. The proposal need not meet all requirements for a POR, but must meet some.

C3.7.7.1. Vendors should ask about requirement documents to determine whether their product can satisfy the requirements (note that in some cases, the requirements document may not be releasable due to disclosure issues). In situations where a requirements document is classified and none of the traditional methods of release are possible, the proposal should include the following:

1. Titles of mission needs statements and/or operational requirements documents, and/or initial capabilities documents, and/or capabilities development documents
2. Date the validated requirements document was signed
3. Name and rank of the signatory
4. Classification of the documents

C3.7.7.2. Providing information in the requirements documents to a vendor allows him or her to make informed business decisions on participation in the DAC or FCT Program and the risks involved. Consistent with U.S. disclosure policy, foreign embassy personnel in Washington, D.C., and U.S. personnel overseas can help facilitate the transfer of such information and documents for FCT projects.

C3.7.8. Proposal Section 8 - Market Investigation. The DAC and FCT Programs require a global market investigation be completed prior to final submission approval. The intent is to ensure that all worthy products are considered prior to starting a project. For purposes of the DAC proposal process, the annual DAC Broad Agency Announcement in the FedBizOpps is considered valid in meeting the requirement for a market investigation. However, certain program contracting officers still may require the sponsoring organization to publish a request for information or a sources sought notice inquiry in the FedBizOpps for each separate proposal. Under the current Federal Acquisition Regulation, Federal procurement offices are required to announce proposed procurement actions over \$25,000 and contract awards over \$25,000 that are likely to result in the award of any subcontracts in FedBizOpps. In some cases, more than one FedBizOpps announcement may be required. For example, an initial announcement would identify existing capabilities to help define the requirement, and a final announcement would address the implementation/procurement potential. FedBizOpps lists notices of government areas of interest, proposed government implementation/procurement actions, contract awards, and other implementation/procurement information. A new edition of FedBizOpps is issued every business day. FedBizOpps, with information on how to use it, is available on the World Wide Web at <http://www.FedBizOpps.gov/>.

C3.7.8.1. For FCT projects, CTO enlists the aid of U.S. personnel overseas in identifying candidate vendors by notifying them of FCT FedBizOpps announcements or forwarding short descriptions of the FCT candidate projects. Vendors should also keep in contact with the Service and user representatives, both through their web sites and by phone, e-mail, and face-to-face meetings.

C3.7.8.2. A thorough market survey helps ensure that the very best equipment gets to the warfighter. It also lessens the likelihood of a vendor lodging a complaint to the contracting officer, the vendor's embassy, or to Congress, because he/she thought they were treated unfairly.

C3.7.9. Proposal Section 9 - Funding Request. As stressed earlier, DAC and FCT projects are intended to get items to the warfighter quicker than the "normal" acquisition process; therefore, we favor projects that require funding for no more than 2-3 years for testing and evaluation.

CTO Funding Requested – list by fiscal year the total amount in millions. Identify the funding requested for the following sub-categories: Test Article Costs, Vendor Test/Support Costs, Lab Range Costs, Program Office Costs, Travel Costs, Miscellaneous Costs.

Service Contribution – list resources the Service are contributing to this project. It is acceptable to take credit for support funding, management, or purchase of test equipment.

Procurement Funding – List the program element (PE) number of the program that has the funds authorized, and the amounts by year programmed for a follow-on procurement should the FCT or DAC project be successful.

PE Title – the official title listed in the budget.

Estimated Production Item Quantities & Unit Cost – list the estimated number of production items and unit cost per fiscal year to be procured and then compute total cost.

C3.7.10 Proposal Section 10 – Test and Evaluation Information. This section is very straightforward self-explanatory question and answer with brief explanations where needed.

Vendor Data Request: Will vendor(s) release test and evaluation data? (Yes/No/Unk)  
Has the PM requested data? (Yes/No/Unk)

Vendor Data Use: Has vendor(s) data been received and validated? (Yes/No/Unk)  
Briefly explain how the vendor data will be used:

Test Article Acquisition: Have the vendor(s) been asked if they are willing to provide test article(s) at no cost or through lease? (Yes/No/Unk)  
Briefly explain plan for test article acquisition:

Contract Management Approach: Identify who will issue the solicitation and contract(s) for test articles:

Developmental Testing: Identify type and nature of any developmental testing to be performed (e.g., any developmental testing required to bring item from TRL 7 to TRL 8 prior to initial operational testing):

Operational Testing: Identify the operational testing required to field with user (e.g., type certification or full functional flight testing) and whether operational testing is covered in test costs:

Test Phases: Identify the test phases (if applicable) and describe the major decision points during the evaluation:

Test Item Maintenance Concept: Will test articles be consumed during testing? (Yes/No/Unk) If maintenance is required other than basic operator maintenance,

identify who will provide it. Describe how test articles will be disposed of at the end of testing.

C3.7.11. Proposal Section 11 - Acquisition/Procurement Strategy. Each proposal is expected to have a letter state there is intent to procure and that procurement funding exists. This letter must come from the flag officer or program director in the acquisition chain of command. If there are no funds in a program element, then a letter from the program director or flag officer promising to program or re-program procurement funds in the next or corresponding is expected. DAC and FCT proposals that have significant procurement potential and dollars will be given a higher priority over those with less, considering all other areas are equal.

C3.7.11.1. Acquisition and Contracting Strategy. The acquisition strategy should allow for a seamless transition from the FCT or DAC project into procurement. This benefits both the POR and the vendor. One method to consider is the Kaminski approach, specifying production options in the test article contract which allows exercising the options without having to pause for a full and open competition for the production articles.

C3.7.11.2. Production & Fielding Logistics Support Strategy. The Service needs to consider fielding or implementation of the production item/process. Projects have completed or nearly completed testing only to have the Service item manager state, "I've no funding programmed for maintaining this item, therefore I cannot approve introduction into our Service inventory." PM's must plan for logistical support and indicate that that planning has taken place.

C3.7.11.3. Buy America Act/Berry Amendment/Specialty Metal Considerations. Consideration of Buy America or Berry Amendment and Specialty Metals must be discussed here. Also need location of production of follow-on procurement should the item test successful.

C3.7.11.4. Projected Decision Date for Acquisition and Fielding Dates. Please submit your best estimate when these would occur based on successful testing.

C3.7.12. Proposal Section 12 - Letters of Endorsement (LOEs). Advocacy for a DAC or FCT project cannot be overemphasized. Service users generate requirements in the DoD acquisition system and Services/USSOCOM fund for procurements. As long as the requirement is current, users strive to maintain procurement funding in annual Service/USSOCOM budgets. An official Service/USSOCOM letter indicating the intent to procure or implement if testing is successful demonstrates the commitment of the Service users to the DAC or FCT project. Likewise, a sponsor's inability to garner support may be an early indication that there is no intent to implement or procure after testing is completed, and in all likelihood that project proposal will not compete for funding.



## CHAPTER 4 PROJECT MANAGEMENT

**C4.1. PROJECT MANAGEMENT OVERVIEW.** The DAC and FCT Programs reduce acquisition costs and timelines, expediting delivery of defense equipment into the hands of our warfighters while being good stewards of our taxpayers' dollars. Our measures of merit are the same that we expect from the FCT and DAC project managers (PMs): cost, schedule and performance.

It is important for the PM to keep his or her respective Service CTO up-to-date on project status and submit required reports on time. DAC and FCT projects provide significant benefits to the warfighter, and since millions of procurement dollars may be at stake, even small projects can have high visibility with Congress, foreign and U.S. vendors and government officials. Congressional committee staffers working with appropriations, foreign affairs, or national security are routinely briefed on DAC and FCT projects and budgets. Questions about funding, relations with a specific nation, a particular aspect of a project, such as compliance with legislation, or concerns about the impact on jobs in the home district are often raised. Therefore, keeping the Service and OSD CTO abreast of project status, especially if there is bad news, is critical.

**C4.2. INTEGRATED PRODUCT TEAMS (IPT).** The PM is responsible for establishing and leading the project IPT. There is no one-size-fits-all IPT solution; while one approach might be structured using a single all-inclusive IPT membership, another management approach might contain multiple phases with evolving IPT membership. Experience has shown that IPTs are a very good mechanism for identifying problems early enough to take preventive action(s). IPT members may include: PM and sponsoring organization representatives, Service CTO representatives, OSD CTO Director and staff, foreign vendor, U.S. Office of Defense Cooperation or other in-country representatives, weapons certification board representatives, test agency personnel, test range personnel, disclosure office representatives, and other personnel from agencies discussed in Appendix 1. Consideration should be given to conducting virtual IPTs when conditions warrant. An evolving IPT approach with tailored membership could include phases such as: project proposal conception; project proposal preparation and submittal; project execution (test conduct, data analysis, and evaluation) and reporting; procurement decision; and Service procurement and fielding. Regardless of the approach:

1. The sponsoring organization's PM has lead responsibility.
2. IPTs are advisory bodies to the PM.
3. Direct communication between the project office and all levels in the oversight and review process is the best way to exchange information and build trust.

**C4.3. PROJECT MANAGEMENT ACTIVITIES.** While all management activities are important for executing a project successfully, activities such as identifying all viable candidates, including domestic items, and identifying the procurement dollars are critical to getting a project approved.

Table C4.T1. PROJECT MANAGEMENT ACTIVITIES

• Proposal Initiation:
- Identify the capability requirement(s) and sponsor(s)
- Identify the procurement dollars
- Conduct a thorough market survey to identify candidates: foreign and domestic contenders
- Convene Integrated Product Team
- Address and plan for release and disclosure issues
• Proposal Submission:
- Develop the acquisition plan and contracting strategies
- Develop the test plan, including all test activities
- Determine resources and timing
• Project Reporting and Execution:
- Provide timely quarterly progress reports
- Manage project funds in accordance with approved project plan
- Provide completed test and financial close-out reports
- Prepare and obtain disclosure for close-out briefing and report for foreign government(s) and vendor(s)
- Determine and execute procurement decisions

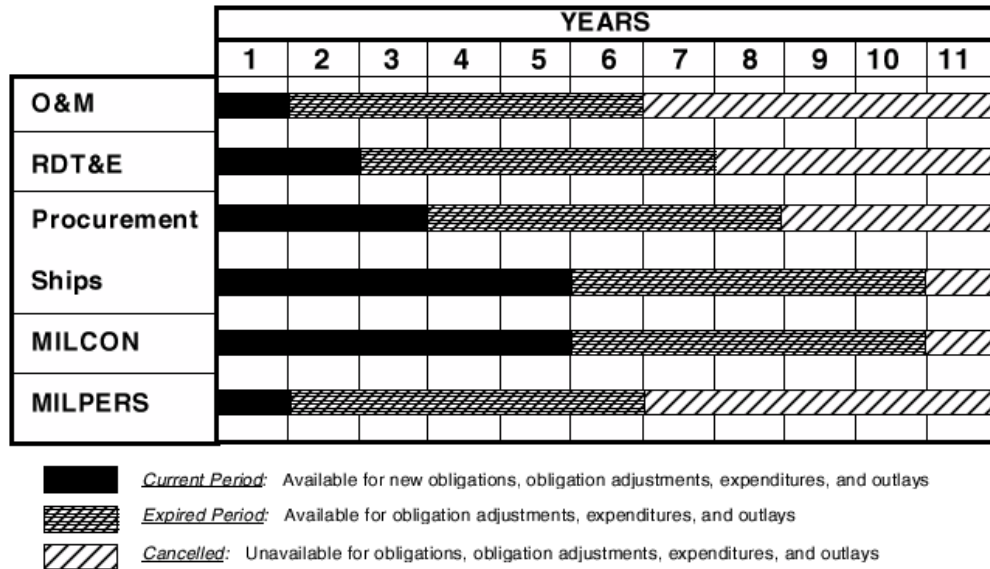
C4.3.1. Project Baselines. DoD 5000.2 directs Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs to establish an acquisition project baseline to document cost, schedule, and performance objectives (desired results) and thresholds (minimum acceptable results) at project initiation. While DAC and FCT projects are not MDAPs or MAISs, it is CTO policy that a project baseline chart is completed as part of the Final proposal submittal. This Project Chart will be signed by the PM upon submission of the Final proposal, kept up-to-date throughout the life of the project and on filed in BIDS.

PMs are to report in a timely manner, through Service CTO representatives to the OSD CTO Director, deviations from the baseline schedule of more than three (3) months or 10% of the annual project cost, as well as any changes in procurement milestones. Funding changes greater than the aforementioned must have written justification and approval by the OSD CTO Director or Deputy (hard copy required for our recordkeeping).

C4.3.2. Financial Management. The OSD CTO Director is responsible for the overall financial management of the DAC and FCT Programs. In executing oversight, CTO issues funding direction, requests project execution data/information, reprograms funds, reviews and submits budget estimates, and reports to higher authorities to include the Office of Management and Budget, Government Accountability Office, and Congress.

C4.3.2.1. Funding provided by Congress to the Department of Defense is allocated in different categories. These different categories of funds have restrictions on their use and length of availability. See the following chart.

### APPROPRIATION LIFE



DAC and FCT funds are Research Development Test & Evaluation (RDT&E) funds that can be obligated over a two-year period. However, the DoD Comptroller and Congress expect all funds to be obligated within the same fiscal year in which they are provided. The project chart submitted with the project proposal must reflect this as part of planned execution of the project. Adequate funding planning should include enough funding to carry a project through the 1<sup>st</sup> quarter of the following year.

#### C4.3.2.2. Budget Formulation

OSD CTO budget inputs are dependent on the Service/SOCOM DAC and FCT final proposal submissions and current ongoing project cost estimates. These budget inputs are the basis for the development of OSD CTO budget documents that are submitted to Congress. DAC and FCT Final proposal and ongoing project descriptions are used in preparing these "R" documents for Congress.

#### C4.3.2.3. Budget Execution

Within their respective organizations, PM's and Service CTO representatives are responsible for the day-to-day financial operations, management, and control of DAC and FCT funds. These offices have:

1. Responsibility to respond to OSD CTO financial drills to include Continuing Resolution Authority (CRA), budget exhibits, Small Business Investment Review (SBIR) tax, and other *ad hoc* requests.
2. Authority to move funds (up to 10%) allocated from one project to another project, provided that: (a) the project designated to receive the funds existed in the same year as funds being transferred (no new-start projects may receive current year funding nor a project that did not receive funding in the prior fiscal year when a continuing resolution authority (CRA) is in effect), (b) that the amount of funds being

- transferred into or out of an existing project does not exceed 10% of the initial amount that that project was approved for that year, and (c) notification and justification is provided to the OSD CTO Director. Amounts over the threshold limitation require prior written approval from the CTO Director (via e-mail is acceptable). The threshold allowable for reallocation is at CTO Director's discretion and is subject to change.
3. Authority to issue approved funding amounts to respective DAC and FCT projects.
  4. Authority to withdraw project funds for redistribution in accordance with OSD CTO Director's guidance (for example for project non-performance).
  5. Responsibility to execute budgets with a 100% obligation rate in the year funds are issued and to make an effort to disburse funds in the second and/or third years of the appropriation's life.
  6. Responsibility to prepare and respond to data calls by the OSD CTO Director.
  7. Responsibility to perform financial analysis to ensure that PMs are obligating and expending funds within approved budgets and to ensure project execution is proceeding satisfactorily.

OSD Acquisition Resources Analysis (ARA) Directorate tracks the variance between planned and actual obligations and measures against an OSD benchmark. OSD CTO is required to report this variance monthly by Service and as a roll up total to ARA. In support of this requirement, Service CTO's are required to submit a monthly execution report, indicating actual obligations and expenditures by project. PM's and Service CTO's are highly encouraged to ensure that their financial execution plans meet or surpass the OSD benchmarks. Underperforming projects will be reviewed quarterly and may result in project cancellation. OSD Comptroller established the benchmarks each fiscal year. Please see the below sample format/table of benchmarks for obligations and expenditures.

Table C4.T2. OSD Obligations & Disbursements vs. Benchmarks

SAMPLE OBLIGATION & DISBURSEMENT RATES												
FIRST FISCAL YEAR	October	November	December	January	February	March	April	May	June	July	August	September
Obligations	8%	16%	24%	33%	41%	49%	57%	65%	73%	81%	90%	90%
Disbursements	4%	8%	12%	16%	20%	25%	29%	33%	37%	41%	45%	55%
SECOND FISCAL YEAR	October	November	December	January	February	March	April	May	June	July	August	September
Obligations	90%	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%	100%
Disbursements	58%	61%	64%	67%	70%	73%	76%	79%	82%	85%	88%	90%

**C4.3.3. Disclosure of Information.** During the course of planning, executing, and reporting a DAC or FCT project, sensitive and sometimes classified information is exchanged between vendors and government organizations. The PM must plan a mechanism for this disclosure. Planning should take place early in the proposal process, anticipating what classified and unclassified information may need to be passed to whom and when (such as a requirements document, test plan, or test report). Also, consider foreign visitor attendance at and participation in test events if applicable, vendor representative-support of the test and evaluation, VIP visits and briefings and release of interim and final test reports to foreign vendors and their government.

**C4.3.3.1.** The DAC and FCT PM must obtain necessary approval for transferring information to various entities. By including the disclosure office on the IPT from the

beginning, the PM can avoid or reduce the delay in sharing U.S. government information. Moreover, special situations can be identified sooner, allowing solutions that are consistent with U.S. government interests and the information requirements of the particular project. In determining what unclassified information to release, the PM should consider the following:

1. Is the unclassified information already available in the public domain?
2. Has the information been cleared for foreign release by an authorized disclosure authority?
3. Have the Defense Technical Information Center or other reviewing authorities previously cleared the unclassified information for public release?

C4.3.3.2. Refer to DoD regulations and local disclosure offices for procedures pertaining to disclosing classified information to foreigners. Asking such questions and setting the stage for unclassified disclosure early in the management process are signs of a project being managed effectively and establishes an environment of trust and cooperation that will maximize opportunities for success.

C4.4. TEST AND EVALUATION (T&E). Successful T&E paves the way for the acquisition process. The test and evaluation of an item is the responsibility of the Service Program of Record. The PM is the authority for project T&E. He/she selects the test items, test locations, executing test organizations, detailed test procedures, determines number and types of tests, and pass/fail criteria. The PM writes the test plan, establishes the thresholds, executes the project, reports progress quarterly or as required, and when a decision is made on procurement, the PM writes the project close-out report.

C4.4.1. Test and Evaluation Plan. Testing of items must be such as to ensure performance, operational effectiveness, and operational suitability of an item for military application. A test approach leveraging previous test and operational data of a non-developmental item will save costs. An ideal DAC or FCT Test and Evaluation plan will use all available/acceptable existing test data. Similarly, the plan should seek to validate pass/fail criteria in a phased approach where possible. This approach reduces the DoD's financial risk by identifying insurmountable problems early in the test and evaluation process. Members of an IPT can be helpful in developing the test plan.

OSD CTO requires current test plans for each active project be kept on file at the Service CTO and on BIDS. OSD CTO staff, as part of the project review process, will review this plan, and a coordinated test plan must be in place prior to commencing testing.

C4.4.2. The Non-Developmental Nature of DAC and FCT. Little or no developmental testing should be needed for items that are commercial-off-the-shelf or already in production. Since DAC and FCT projects focus mostly on non-developmental and near-non-developmental items, the proposed test and evaluation approach should be operational in nature. Operational tests are structured to determine performance of the item under realistic conditions. The evaluation determines the effectiveness and suitability of the item against the minimal acceptable operational performance requirements (threshold values) and those specific requirements designated as Pass/fail criteria. The contractor/vendor may not be allowed to witness testing in order to protect competing participants intellectual property rights.

For some items, statutory requirements may dictate that certain testing be done by the United States even if foreign or vendor data exists. For example, weapons and munitions must demonstrate a certain level of reliability for safety reasons.

C4.4.3. Pass/Fail Criteria. Early test and evaluation against the pass/fail criteria avoids wasting scarce resources. Pass/fail criteria are defined as capabilities or characteristics so significant that failure to meet the minimum acceptable value (threshold value) is normally cause for project termination. If an item fails to meet pass/fail criteria, testing on that item should be halted and the reason for failure carefully reviewed. This review will determine whether to continue the test or remove the item from consideration. In the case of a qualification test, failure of the item to satisfy a pass/fail criteria normally results in termination of the project.

Testing Competing U.S. Domestic Items (FCT Only). An FCT project must include the test and evaluation of all credible U.S. domestic candidates identified by market research or fedbizopps.gov solicitation. Candidates can be eliminated from testing by application of down-select criteria. All competing U.S. items must be tested in the same time period to the same test criteria as the foreign items. The sponsoring organization must either fund or secure DAC funding for all costs associated with testing and evaluating U.S. products, as the FCT Program is legislatively restricted to funding test and evaluation of the foreign items.

C4.4.4.1. If a U.S. candidate is identified after a FCT project has been approved and funded, the PM must immediately notify the respective Service CTO, and they in turn notify OSD CTO. The Service CTO will work with the PM and OSD to make project changes/decisions and allow an opportunity to make near-term and out-year fiscal adjustments, should they be necessary. Also, this immediate handling lessens the likelihood of a U.S. vendor lodging a complaint.

C4.5. ACQUISITION AND CONTRACTING STRATEGY. Given that DAC and FCT are procurement programs, developing and documenting a viable acquisition strategy is a key element in the Final proposal developed by the PM. This acquisition strategy will serve as the road map for project execution, from program initiation through production procurement to post-production support. This is the approach a PM intends to use to acquire test articles and dovetail into procurement. Fundamental to all is the contracting strategy or contracting approach to implementing this acquisition strategy.

C4.5.1. For the DAC and FCT Programs, the acquisition strategy documents the PM's intention to acquire the test article and the production quantities after a successful evaluation. The contracting strategy documents the contracting method (for acquiring the test articles and the procurement quantities) to support the PM's acquisition strategy.

C4.5.2. In the same vein, the sponsoring organization identifies the valid requirement and identifies the items (material solutions) for testing under the DAC or FCT Programs.

C4.5.3. The Contracting Officer assists the PM in matching the contracting and acquisition strategies. As the PM formulates strategies for acquiring both test and production items, there are issues to consider. One is the amount of risk that the vendor is willing to share. For example, will the vendor provide the test items at no/low cost or, if modifications are required prior to testing, make any modifications to the item at no or low cost? Such actions are not only more economical, but signal a cooperative risk-sharing that is a good foundation for success. It is also an outstanding measure of a vendor's confidence in its product.

C4.5.4. In summary, the acquisition and contracting strategy must be complementary. The PM decides the best approach by answering the following questions and having the facts to support the decision:

1. Is the acquisition strategy and supporting contract approach for test articles consistent with the preferred contracting approach to expedite production implementation/procurement following a successful test? (e.g., Kaminski acquisition guidance memo considered)

2. What will the PM do if a credible contender arises during the execution of the test?
3. Who will prepare the contract?
4. Who will award the contract?
5. Who will administer the contract after award?
6. When will the contract be awarded?
7. What is the contract period of performance?
8. What mechanisms will be used to obtain data rights or intellectual property?
9. How will items be maintained during the test and after implementation or procurement?

**C4.6. CONTRACT PREPARATION.** Once the acquisition and contract strategies are outlined and test roles and responsibilities are defined, the Service PM works with his/her contracting office to craft and award the contract for testing. The PM is responsible for preparation and oversight of contracts awarded by the supporting contract office. The CTO Service/USSOCOM financial managers must keep PM's informed of OSD Financial Benchmarks so PM's along with contracting officers can structure contracts that meet obligation and expenditure benchmarks. Where possible, contracts should incorporate performance based and/or progress payments. A vendor may be contacted by the PM during the pre-award phase to provide information on item pricing and availability. The fluctuation in foreign exchange needs to be taken into account in contract preparation. It is advisable to use U.S. dollars instead of the foreign currency.

**C4.7. CONTRACT MANAGEMENT.** The DAC or FCT PMs along with their Service/SOCOM contracting officers are responsible for initiating all project contract actions and providing fiscal oversight. Also, DCMA can be a key player on the DoD acquisition team. Prior to contract award, DCMA joins the pre-award team to help construct effective solicitations; identify potential performance risks; select capable contractors; and develop contracts that are easily administered with less risk of costly modifications. After the contract is awarded, DCMA oversees the contract to ensure product, cost and schedule compliance and, in cases of contractual delays and other unforeseen issues, DCMA helps the military services make alternative arrangements to ensure our warfighters have the supplies and services they need. In the case of FCT's, Defense Contract Management Agency International (DCMA-I), acts as the single contract administration service element outside the continental United States for DoD contracts. Any contract award resulting from a DAC or FCT bid solicitation will contain the clause at DFARS 252.232-7003, Electronic Submission of Payment Requests, which requires electronic submission of all payment requests. Where required in DFARS 232.7003 vendor invoicing will be done electronically using Wide Area Workflow. Wide Area Workflow and information can be found at <https://wawf.eb.mil/>.

**C4.8. REPORTING REQUIREMENTS.** OSD CTO has ultimate responsibility for fiscal and T&E management of the DAC and FCT Programs. To determine if DAC and FCT projects are progressing satisfactorily and to identify problems early enough in the program to take corrective action, OSD requires monthly financial reporting and quarterly project status reports. OSD CTO relies on the PM's and the Service/SOCOM CTO focal points for successful project management. Reports not only reinforce accountability and provide status information throughout the life of a project, they also document the results of a DAC or FCT test and are the basis for decisions on production procurements.

**C4.8.1. Quarterly Progress Reports.** The Services compile and post quarterly progress reports for each active DAC and FCT project to the Broad Area Announcement Information Distribution System (BIDS), a web-based database, (<https://cto.acqcenter.com/osd/portal.nsf>). These reports are due by the last working day of the month after the end of each reporting period. PMs are expected to report major milestones as they attain them (email is acceptable) without waiting for the quarterly report. Reports should allow managers to identify difficulties in a timely manner to ensure prompt remedial action. A typical Quarterly Progress Report is a one-page narrative and includes an updated project chart. The PM is expected to report

quarterly the status of the procurement funding identified in the proposal. OSD CTO is routinely asked about the status of transition of all ongoing projects and randomly checks the status of Service procurement PE's. Should the funding for procurement be pulled or no longer be available, projects are in jeopardy of termination. The format for the Quarterly Progress Report is available in Appendix 4.

C4.8.2. Financial Reports. The Services provide the OSD CTO Director with monthly financial reports, which indicate the funds execution status of each DAC and FCT project. These financial reports provide information for projects authorized in the current fiscal year, as well as the two preceding fiscal years. The financial information should be reported to the OSD CTO Financial Manager monthly eight days following the last working day of each month. All projects executing below OSD benchmark should include a brief statement indicating why it is executing below and when it will meet OSD benchmark execution. Additional financial reports providing information for projects in the current fiscal year and six preceding fiscal years, if applicable, will be reported twice a year, March and September. A funding report format is available in Appendix 5.

C4.8.3. Project Reviews and Annual Kickoff Meeting. The PM may be required to present project reviews for selected DAC and FCT projects. Reviews may be requested as part of the annual DAC or FCT Proposal review and approval process. Sponsoring organizations, PMs, and vendors involved in all new-start projects approved for the coming year will be invited to attend the CTO Kick-Off meeting and reception hosted by the OSD CTO Director.



## CHAPTER 5 PROJECT CLOSEOUT

**C5.1. PROJECT CLOSEOUT OVERVIEW.** The purpose of the DAC and FCT Programs is to get necessary equipment into the warfighter's hands as rapidly as possible – from testing to procurement and fielding. If an item evaluated in either the DAC or FCT Programs meets requirements and provides best value, there is the expectation that the item will be procured or implemented.

**C5.2. TECHNICAL TEST REPORT AND PROJECT CLOSEOUT REPORT.** The sponsoring organization must provide final test reports and closeout reports to the vendor(s), Service CTO and OSD CTO in accordance with the test contract. A DAC or FCT PM's initial planning for the structure of the test report must consider release of the information to domestic vendors as well as foreign vendors and governments. By involving the proper experts in up-front planning, the PM can avoid unauthorized release of classified or sensitive unclassified information or compromise of proprietary information.

C5.2.1. At the conclusion of each funded DAC or FCT project, the sponsoring organization shall provide a final closeout report through the Service CTO to OSD to include as a minimum:

1. A summary of the purpose and overall description of the project
2. Funding provided and expended, by fiscal year
3. Results of testing, with focus on pass/fail criteria
4. Disposition of test items
5. Any implementation or procurement decisions
6. Contract recipient, location, award dates, and amounts (include program element and contract number so the Services can track follow-on procurements)
7. All vendors participating in the test
8. Actual or estimated cost avoidance in research, development, test and evaluation funds, savings in production and life cycle costs, and time saved in fielding items
9. Any U.S. production planned, to include name and location of U.S. company
10. Procurement point of contact information

C5.2.2. A closeout report format is outlined in Appendix 7. At a minimum, all information in the appendix example needs to be provided. A project can be considered completed when the closeout report sent to OSD is accepted as complete and the PM has provided a Test Report to the vendor. Classified or sensitive U.S. test data shall be provided to the foreign manufacturers only in strict accordance with DoD security regulations. It is important to note that even though a final closeout report has been submitted, financial reporting is still required monthly until all funds provided have been fully expended.

**C5.3. FOLLOW-ON PROCUREMENT REPORTING.** After a project has been closed out, PMs and Service CTO representatives are responsible for reporting whether the completed DAC and FCT item or technology was procured or implemented. Key information required includes date of procurement, quantity and dollar amounts of the total procurement, and program(s) benefiting from the procurement and is entered into BIDS database. In addition, any subsequent implementations or procurements are to be reported to the Service CTO representatives, who will in turn notify the OSD CTO.

C5.5. DAC ANNUAL REPORT TO CONGRESS. By law, the Secretary of Defense must report the status of DAC annually to Congress. OSD CTO prepares the report with input from the Service CTO representatives. The DAC Annual Report discusses the technologies/items tested, funds expended, implementations and procurements resulting from the program, U.S. jobs generated, benefits to readiness of U.S. warfighters, and cost savings realized through the program.

C5.6. FCT ANNUAL YEAR IN REVIEW REPORT. OSD CTO writes an annual year in review report for archival purposes. The FCT Year in Review highlights technologies tested, funds expended, implementations and procurements resulting from the program, U.S. jobs generated, benefits to readiness of U.S. warfighters, and cost savings realized through the program. The report is a means for the Services to document their successes in the FCT Program as a cost-effective tool for increased readiness.

APPENDIX 1  
PARTICIPANTS AND THEIR RESPONSIBILITIES

This appendix provides supporting information on roles and responsibilities for the key participants in the DAC and FCT Programs and the proposal process. A successful DAC or FCT project depends on coordination among multiple participants. Service CTO representatives can provide details on participants involved in specific DAC or FCT projects.

Participants in the DAC and FCT Programs

<ul style="list-style-type: none"><li>• Congress</li><li>• Department of Defense</li><li>• Under Secretary of Defense (AS&amp;C)</li><li>• OSD CTO/Director</li><li>• Comparative Testing Offices in the Services</li><li>• Component Acquisition Executive</li><li>• Program Executive Office</li><li>• User/Warfighter</li><li>• Sponsoring Organization</li><li>• Project Manager (Sponsor)</li><li>• Integrated Product Team</li><li>• Contracting Officer</li><li>• Test Organization</li></ul>	<ul style="list-style-type: none"><li>• Laboratory</li><li>• Program Element Monitor</li><li>• Resource Sponsor</li><li>• Requirements Sponsor</li><li>• Systems Command (SYSCOM)</li><li>• System Program Office (SPO)</li><li>• Material Developer</li><li>• Defense Contracting Management Agency</li><li>• Defense Finance Accounting Service</li><li>• U.S. Embassy Representatives</li><li>• Foreign &amp; Domestic Vendors</li><li>• Foreign Government Organizations</li><li>• Resource Advisors</li></ul>
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Congress

The Congress authorizes and appropriates the federal budget. In discharging this responsibility with regards to the DAC and FCT Programs, Congress exercises both a budgetary and an oversight function. Both programs exist as a result of specific legislation; therefore, the Congress examines the conduct of the programs to ensure they comply with the intent of the law and do not violate Congressional direction. Legislation requires that Congress be given a 30 window to review and comment on FCT projects prior to initial funding (does not apply to DAC projects).

Congress:

- Can elect to fund all, some, or none of the nominated FCT projects
- Maintains oversight of the DAC and FCT Programs and monitors high-visibility projects through appropriation and authorization committees
- Inquires about selected projects
- Monitors the implementations and procurements resulting from the DAC and FCT Programs

## Department of Defense (DoD)

Within the DoD, major participants include the Office of the Secretary of Defense (OSD), the sponsoring organizations, and the users/warfighters. The OSD Comparative Testing Office is administered through the U.S. Department of Defense in the Office of the Under Secretary of Defense for Advanced Systems and Concepts. The OSD Comparative Testing Office provides oversight of Service CTO representatives and their execution of funded projects.

## Under Secretary of Defense (Advanced Systems and Concepts)

For the DAC and FCT Programs, the Under Secretary:

- Endorses final project selections
- Interacts with senior government and defense representatives on issues relating to the status of projects
- Signs the DAC Annual Report to Congress or forwards it to the Secretary of Defense for signature

## OSD CTO Director

The OSD CTO Director is the focal point for DAC and FCT Program matters within the OSD. The Director manages the DAC and FCT Programs for the OSD. The OSD CTO Director:

- Establishes and fosters an environment to facilitate successful projects
- Establishes and publishes policy and procedures
- Fosters a joint approach for the DAC and FCT Programs
- Ensures projects are consistent with the policies and principles articulated in DoD directives and regulations
- Assesses program status and risk to the user or the user's representative
- Forms a multi-Service team to review project proposals
- Establishes project evaluation criteria
- Briefs and provides recommendations to the Deputy Under Secretary of Defense (Advanced Systems and Concepts) concerning new start proposals and continuing project proposals
- Participates in or supports IPTs
- Organizes and hosts the DAC and FCT Program Annual Kick-Off Meeting
- Directs periodic offsite training meetings to foster joint cooperation and understanding of the DAC and FCT Programs
- Participates in DAC and FCT program-related diplomatic and Congressional activities
- Approves changes in the project budgets and timelines that exceed baseline thresholds for the Services

Financial duties:

- Prepares the DAC and FCT Program input for the President's Budget submittal
- Justifies funding requests to Congress
- Manages the OSD-level proposal selection process
- Prepares and coordinates Congressional Notification Packages
- Coordinates the DAC and FCT Program financial activities at the OSD level

#### Informational Duties:

- Responds to Congressional, media, and international inquiries
- Publishes the DAC Annual Report to Congress
- Publishes the FCT Program Annual Year in Review Report
- Briefs Congress, foreign embassy representatives, and others, as necessary, on the status of the DAC or FCT Programs
- Ensures the Services properly close out each project, financially and technically
- Assists information exchange within the DAC and FCT communities
- Educates and updates the DAC and FCT communities on acquisition and policy matters affecting the program
- Educates the DoD acquisition community about DAC and FCT
- Educates foreign governments and foreign vendors about DAC and FCT
- Leads and assists sponsoring organizations in the effort to identify candidate items for testing under the DAC or FCT Program

#### U.S. Embassy Representatives and Offices of Defense Cooperation (ODC)

Various DoD organizations have representatives overseas. These representatives, such as ODCs, Defense Attaché offices, Air Force Liaison Offices, and Army Research, Development, and Standardization Groups are often located in or near U.S. embassies. They are uniquely positioned to interact with foreign vendors and foreign government organizations concerning the DAC and FCT Programs. The in-country representative:

- Provides information regarding U.S. requirements and acquisition programs to the host country
- Informs host country government and industry representatives about how the DAC and FCT Programs operate
- Serves as interface for government-to-government, government-to-industry, and U.S. industry-to-host-country-industry contact and coordination, including visiting foreign vendor sites to monitor project status, witness testing, or helping to resolve host country concerns
- Serves as IPT members when requested
- Identifies DAC and FCT Program opportunities to the CTO representatives
- Provides language assistance

#### Domestic/Foreign Vendors and U.S. Partners

Vendors with non-developmental and near-non-developmental items should consider the DAC and FCT Programs as ways of introducing their product(s) to the U.S. defense market. The FCT Program is for foreign vendors' defense items and the DAC is primarily for domestic defense items.

However, U.S. vendors can also be involved in the FCT Program either as teaming partners for foreign vendors or as domestic competitors. As a teaming partner, the U.S. vendor acts in conjunction with the foreign vendor. A U.S. competitor in a comparative test has the same responsibility as the foreign vendor. However, the sponsoring organization must either fund or secure DAC funding for the test and evaluation of the domestic product.

Furthermore, while there is no legal requirement for U.S. production of foreign items within the FCT Program, one avenue foreign vendors might pursue to strengthen their marketing efforts is industrial teaming. A teaming arrangement can include work sharing or perhaps U.S. production of a foreign-developed item under license. Teaming can lead to long-term industrial relationships and provide both partners a presence in the international market and is highly

encouraged.

To enhance participation in both the DAC and FCT Programs, vendors may market their products at trade shows and present their products to potential users. Vendors also should watch for Requests for Information, Requests for Proposals, and Sources Sought Notices on FedBizOpps to identify opportunities where their non-developmental item could be applied to a Service need. FedBizOpps is available on the World Wide Web at <http://www.FedBizOpps.gov/>.

The vendor:

- Monitors the FedBizOpps for Broad Agency Announcements, Requests for Information, Requests for Proposals, and Sources Sought Notices pertaining to their products
- Brings world-class products for DAC and FCT Program consideration to the attention of Services or U.S. representatives
- Provides information to the sponsoring organization's DAC or FCT project manager as IPT participants
- Informs the sponsoring organization's PM about existing test and evaluation information and data on their products
- Markets products to the user
- Informs the sponsoring organization's PM about existing contracts that might already be in place to obtain test articles
- Provides pricing and availability data
- Understands avenues other than the DAC or FCT Program for selling items to the DoD
- Assists in the test plan development, conduct, and evaluation
- Looks beyond the DAC or FCT Program's effort and focuses on the production/implementation/procurement phase

APPENDIX 2  
CTO PROPOSAL FORMAT  
**Defense Acquisition Challenge (DAC) and Foreign Comparative Testing (FCT)**  
**Proposal Form** (as of Dec 2007)

***ALL** submitters...please complete all of the \*Asterisked items for the “Draft Proposal”.*  
***Project Managers...** please complete in entirety before submitting as a “Final Proposal”*

## 1. Proposal Information

**Proposal Type:\***      ☐ DAC      ☐ FCT

**Proposal Title:\*** (Provide a short descriptive title (75 characters or less))

**Primary Service:\***

☐ Army                      ☐ Navy/USMC                      ☐ Air Force  
☐ USSOCOM                      ☐ JPEO CBD                      ☐ OTHER: \_\_\_\_\_

**Joint Project:**   ☐ Yes      ☐ No

**Additional participants:** (If applicable)

☐ Army                      ☐ Navy/USMC                      ☐ Air Force  
☐ USSOCOM                      ☐ JPEO CBD                      ☐ OTHER: \_\_\_\_\_

**Joint Agreement:** (If applicable)

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**Government Project Manager/Service Focal Point\*** Government PM that will actually manage the testing.

Name:
Title/Position:
Organization:
Phone Number:
E-mail Address:

**Government Program of Record (POR)** Government POR that will actually procure and insert the technology or item within this proposal.

Government Program Office:
Name of Contact:
Address:
Telephone Number:
Fax Number:
Email Address:

## 2. Project Description.\*

### a. Two-Sentence Summary (400 Characters) \*

Provide a 2 sentence description of the product, technology, or process in layman's terms.

### b. Challenge Details (10000 Characters)\*

Describe how the proposed technology or product “challenges” and improves upon the existing technology or product that is currently in use.

### c. Deliverable (2500 Characters)\*

Describe the intended deliverable of this project.

### d. Pass/Fail Criteria (2500 Characters)

List below the thresholds/requirements that must be met to be considered a success.

## 3. Candidate items to be tested.\*

List all candidate items to be evaluated. Indicate development status i.e. non-developmental (NDI), commercial off-the-shelf (COTS), prototype, in production, fully developed but not in production, whether/how item is being used right now and the Technology Readiness Level (TRL) (see TRL description in CTO Handbook). Items with a current TRL of less than 7 will be referred to a research organization and not pursued under the CTO.

Small Business (500 or fewer Employees)

Medium/Large Business (Greater than 500 Employees)

**All Amounts in \$M (e.g., \$600K = \$0.600M)**

Vendor	Size of Business: (# of Employees)	Address	Item Name	Unit Cost	Quan- tity	Total Cost	TRL
(Phone, Email)							

**Click to add additional Vendor Information.**



#### 4. **Benefit to the Warfighter.\***

Describe specifically the improved Performance/Operational Capability benefit to the warfighter. Also discuss the potential reduction in fielding time if this proposal is approved and the impact to the warfighter/user if this proposal is not approved.

#### 5. **Cost Avoidance/Savings.\***

##### **a. RDT&E Cost Avoidance/Savings (if applicable):\* \$ \_\_\_\_\_**

If the U.S. Government were to develop this item, estimate how much it would cost. Do not deduct the cost of doing the FCT/DAC. Describe the method used to estimate RDT&E savings:

##### **b. Manufacturing Cost Avoidance/Savings (if applicable):\* \$ \_\_\_\_\_**

Briefly discuss and show mathematical analysis used to estimate the Manufacturing Savings in time and cost as a result if process or technology is implemented:

##### **c. Procurement Cost Avoidance/Savings (if applicable):\* \$ \_\_\_\_\_**

Estimate savings in per unit cost if item is procured for production. Describe the method used to estimate procurement savings:

##### **d. Operations and Support Life-Cycle Cost Avoidance/Savings (if applicable):\***

**\$ \_\_\_\_\_**

Estimate the savings in operations and support costs over item's life cycle. Predict the # of years the item will be in use following procurement. Describe the method used to estimate O&S savings:

#### 6. **Intellectual Property Rights (IPR).\***

Describe the strategy of how IPR will be managed (i.e. licensing agreement, vendor retains all IPR, US Gov't will retain all IPR, etc.) and how any IPR restrictions and costs may impact the procurement of the technology discussed in the proposal.

## 7. Requirement/Justification.

**Validated or Approved Requirement/Capability Document:**

Title:	
Number:	
Date Signed:	
<input type="checkbox"/> Signed by:	<input type="checkbox"/> DRAFT
Name & Grade/Rank:	
Title/Position:	
Organization:	

[Click to add additional Requirement/Capability documents.](#)

## 8. Market Investigation.

**Federal Business Opportunities (FedBizOpps) Announcement.** The sponsoring organization must publish a FedBizOpps Announcement, which announces proposed procurement actions over \$25,000, for each separate proposal as required by the Federal Acquisition Regulations. The DAC BAA qualifies as an acceptable initial FedBizOpps Announcement for all DAC proposals submitted.

Type of announcement (RFI, RFP, BAA, etc.):
Announcement Title:
Date of FedBizOpps announcement:
"Respond by" date in FedBizOpps announcement:

[Click to add additional FedBizOpps announcements.](#)

**9. Funding Request.** All Amounts in \$M (e.g., \$600K = \$0.600M)

CTO Funding Requested	Year	FY ____	FY ____	FY ____	FY ____	Total
Test Article Costs Vendor Test/Support Lab/Range Costs Program Office Costs Travel Costs Miscellaneous Costs	Dollars (\$M)	\$	\$	\$	\$	\$
(Please also note the projected total length of project from start of the Fiscal Year to completion in months): ____Mos.						
<b>Sponsor Contribution</b> Resources are you contributing to this project? For example funding for: test equipment, travel, purchasing of test items, paying for management and administrative support, etc.?	(NOTE: CTO funding <u>cannot</u> be used to acquire or test competing U.S. items for FCT proposals.)	FY ____	FY ____	FY ____	FY ____	Total
		\$	\$	\$	\$	\$
<b>Procurement Funding</b> Service/USSOCOM program element (PE) identified to fund follow-on procurement and fielding of DAC/FCT item(s)?	PE Number: _____	FY ____	FY ____	FY ____	FY ____	Total
		\$	\$	\$	\$	\$
PE Number PE Title: PE Manager (Name, Phone, Email)						
Estimated Procurement Item Quantities & Unit/Total Cost	Quantity & Unit Cost	____#	____#	____#	____#	____#
		\$	\$	\$	\$	\$
	Total Cost	\$	\$	\$	\$	\$

Click to add additional Procurement Item estimates.

## 10. Test and Evaluation

Will Vendor release the test and evaluation data?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Has the PM requested the data?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Has vendor data been received and validated?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Briefly explain how the vendor data will be used.			
Have the vendors been asked if they are willing to provide test articles at no cost or through lease? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk			
Briefly explain the plan for test article acquisition.			
Identify who will issue the solicitation and contract for test articles.			
Identify the type and nature of any developmental testing to be performed (e.g., any developmental testing required to bring item from TRL 7 to TRL 8 prior to initial operational testing.			
Identify the operational testing required to field with user (e.g., type certification or full functional flight testing) and whether operational testing is covered in test costs.			
Identify the test phases and describe the major decision points during the evaluation.			
Will test articles be consumed during testing? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk			
If maintenance is required other than basic operator maintenance, identify who will provide it. Describe how test articles will be disposed of at the end of testing.			

## 11. Acquisition/Procurement Strategy of Production/Fielded Item.

Describe the acquisition and contracting strategy to acquire the item after the testing is completed assuming item meets requirements. Contract strategies may include: (Kaminski Approach (see Handbook if unfamiliar with this method), sole source, full and open competitive solicitation, etc.). Also describe how the POR will transition the project from testing to procurement to fielding, and list projected dates.

Acquisition and Contracting Strategy:
Production & Fielding Logistics Support Strategy:
Buy America Act / Berry Amendment / Specialty Metal Considerations/ Other Issues:
Projected Decision Date for Acquisition of Technology/Product:
Projected Fielding Date for Technology/Product:

## 12. Required Attachments:\* NOTE: QUAD CHART is required for Draft Proposal.

**ALL others listed here, plus updated Quad required for Final Proposal.** For Quad Chart and Project Chart see format in the Handbook and/or templates on website under Reference Materials. Letters of Endorsement are to come from official(s) who have procurement authority and user(s)/customer(s). A flag level/general officer endorsement for procurement authority is highly encouraged. Letters ideally come from PEO/Program Office and using authority/customer.

<b>Quad Chart*:</b>
<b>Project Chart:</b>
<b>Letter(s) of Endorsement:</b>

**APPENDIX 3**  
**CTO PROPOSAL CHECKLIST**  
**DAC/FCT Draft Proposal Evaluation - Checklist**

<b>Proposal Type</b>	Circle One:    DAC        FCT	<b>Grade-Circle One</b>
<b>Proposal Title</b>		Green
<b>Primary Service</b>	Army    Navy/USMC    Air Force    USSOCOM    JPEO CBD	Yellow
<b>Joint Project</b>	<b>Circle one:</b> YES        NO	Red
<b>Submitter Info (PM/Vendor)</b>		
<b>POR Info (If different than PM)</b>		
<b>Service Priority</b>		

<b>Color</b>	<b>Description (Rate each proposal assigning color code criterion below)</b>
<b>Green</b>	<b>Meets all requirements</b>
<b>Yellow</b>	<b>Questionable- May be deficient; further discussion is needed</b>
<b>Red</b>	<b>Deficient- Deems entire proposal as unacceptable</b>

<b>Proposal Section</b>	<b>Criteria</b>	<b>Grade</b>
<b>2</b>	<b>Project Description</b> Green = Summaries, Deliverable(s), and Pass/Fail Criteria are all valid, realistic, and provide mission essential added value Yellow = Summaries, Deliverable(s), and Pass/Fail Criteria are incomplete and/or need additional refinement, but clearly have potential Red = Summaries, Deliverable, and Pass/Fail Criteria are clearly not valid, realistic, and/or do not provide added value	
<b>3</b>	<b>Current Technology Readiness Level</b> Green = Actual system completed, qualified, and proven for mission operations through test and demonstration (TRL=8-9). Yellow = System prototype demonstration in an operational environment (TRL = 7). Red = Less than system prototype demonstration in an operational environment (TRL < 7).	
<b>4</b>	<b>Benefit to the Warfighter</b> Green = Significant benefits, e.g. addresses <u>mission-essential</u> warfighting requirement, rapidly provides capability to warfighter. Yellow = Moderate to low benefits, e.g. addresses <u>mission-enhancing</u> capability, but may not necessarily be critical. Red = No benefits or benefits cannot be determined. <i>Note: Consider such merits as operational capability, affordability, manufacturability, or improved performance, at the component, subsystem, or system level of a Program of Record (POR).</i>	
<b>5</b>	<b>Cost Avoidance</b> Green = Significant amount of Cost Schedule & Performance (CSP)/Return on Investment (ROI) (100%+). Yellow = Low amount of CSP/ROI. Red = No advantage. <i>Note: Consider all sources of cost avoidance cited in the proposal as well as, sponsor contribution of funding to the total project cost when determining CSP/ROI.</i>	
<b>6</b>	<b>Intellectual Property Rights</b> Green = Clear path on IPR with no restrictions to U.S. or minimal costs. Yellow = Restrictions and costs are significant and further negotiations will be necessary. Red = No clear path on Intellectual Property Rights.	
	<b>TOTAL</b>	

***Reviewer's Comments, Summary, Questions, Issues***

List issues/questions/summary of comments as needed. (For every criteria above that did not receive a Green rating, please explain why)

**Recommendation:**   ☐ **YES Merits a Final Proposal**      or      ☐ **NO Not worth the effort**

### DAC/FCT Final Proposal Evaluation - Checklist

<b>Proposal Type</b>	Circle One:    DAC        FCT	<b>Grade-Circle One</b>
<b>Proposal Title</b>		Green
<b>Primary Service</b>	Army   Navy/USMC   Air Force   USSOCOM   JPEO CBD	Yellow
<b>Joint Project</b>	<b>Circle one:</b> YES        NO	Red
<b>Submitter Info (PM/Vendor)</b>		
<b>POR Info (If different than PM)</b>		
<b>Service Priority</b>		

Color	Description (Rate each proposal assigning color code criterion below)
Green	Meets all requirements
Yellow	Questionable- May be deficient; further discussion is needed
Red	Deficient- Deems entire proposal as unacceptable

Proposal Section	Criteria	Grade
<b>2</b>	<b>Project Description</b> Green = Summaries, Deliverable(s), and Pass/Fail Criteria are all valid, realistic, and provide mission essential added value Yellow = Summaries, Deliverable(s), and Pass/Fail Criteria are incomplete and/or need additional refinement, but clearly have potential Red = Summaries, Deliverable, and Pass/Fail Criteria are clearly not valid, realistic, and/or do not provide added value <i>Note: Only DAC proposals must have both Summaries</i>	
<b>3</b>	<b>Current Technology Readiness Level</b> Green = Actual system completed, qualified, and proven for mission operations through test and demonstration (TRL=8-9). Yellow = System prototype demonstration in an operational environment (TRL=7). Red = Less than system prototype demonstration in an operational environment (TRL < 7).	
<b>4</b>	<b>Benefit to the Warfighter</b> Green = Significant benefits, e.g. addresses <u>mission-essential</u> warfighting requirement, rapidly provides capability to warfighter. Yellow = Moderate to low benefits, e.g. addresses <u>mission-enhancing</u> capability, but may not necessarily be critical. Red = No benefits or benefits cannot be determined. <i>Note: Consider such merits as operational capability, affordability, manufacturability, or improved performance, at the component, subsystem, or system level of a Program of Record (POR).</i>	
<b>5</b>	<b>Cost Avoidance</b> Green = Significant amount of Cost Schedule & Performance (CSP)/Return on Investment (ROI) (100%+). Yellow = Low amount of CSP/ROI. Red = No advantage. <i>Note: Consider all sources of cost avoidance cited in the proposal as well as, sponsor contribution of funding to the total project cost when determining CSP/ROI.</i>	
<b>6</b>	<b>Intellectual Property Rights</b> Green = Clear path on IPR with no restrictions to U.S. or minimal costs. Yellow = Restrictions and costs are significant and further negotiations will be necessary. Red = No clear path on Intellectual Property Rights.	
<b>7</b>	<b>Valid Requirement</b> Green = Signed requirements document/letter. Yellow = Requirements document/letter in draft. Red = No requirement or need documentation.	



Proposal Section	Criteria	Grade
8	<b>Market Investigation</b> Green = FedBizOpps (BAA, RFI, Sources Sought) completed within 12 months. Yellow = FedBizOpps in process or >12 months old. Red = FedBizOpps not addressed. <i>Note: The DAC BAA qualifies as an acceptable FedBizOpps Announcement</i>	
9	<b>Project Schedule</b> Green = Testing completed within 3 years (Funding required for 2 fiscal years); No disruption to POR. Yellow = Testing completed within 4 years (Funding required for 3 years) / Disruption to POR not quantified, item fielded <u>more</u> than 12 months after project completion. Red = Testing exceeds 4 years (Funding required for more than 3 fiscal years) or the test schedule appears unattainable/unrealistic or unacceptable disruption to POR. <i>Note: Ammunition proposals add one year for testing and funding criteria.</i>	
9	<b>Procurement Potential</b> Green = Significant procurement potential and Program Element dollars programmed for procurement. Yellow = Moderate to low procurement potential or Program Element dollars identified/planned but not yet programmed. Red = No procurement potential and/or no Program Element dollars identified. <i>Note: Consider end item procurement(s) that result from a process improvement.</i>	
10	<b>Test and Evaluation Strategy</b> Green = Test and evaluation strategy has been well thought-out, with plans for: test article acquisition, phased testing (as applicable), mainly operational T&E efforts and test article disposition. Yellow = Test and evaluation strategy is sparse on details and/or requires major developmental T&E. Red = Weak or non-existent test and evaluation strategy.	
11	<b>Acquisition Strategy- Procurement for Deployment</b> Green = Production options written into test article contract (e.g.. FCT Kaminski Approach) or procurement is planned on another contract that is already in place or Indefinite Delivery Indefinite Quantity (IDIQ) contract or strategy shows clear path/methodology for transition to warfighter. Yellow = Contract for procurement is not in place, but has acquisition strategy for future contract or buy. Red = No procurement strategy.	
12	<b>Letter of Endorsement</b> Green = Signed Letter of Endorsement from Acquisition Executive, Flag Level Officer/Program Director (or acquisition official who oversees the Program Element) that states intent to procure upon completion. Yellow = Signed Letter of Endorsement with support for proposal, but no intent to procure. Red = No Signed Letter of Endorsement.	
	<b>TOTAL</b>	

***Reviewer's Comments, Summary, Questions, Issues***

List issues/questions/summary of comments as needed. (For every criteria above that did not receive a Green rating, please explain why)

**Recommendation:**   ☐ YES Approve   or   ☐ NO Disapprove

APPENDIX 4  
QUARTERLY PROGRESS REPORT FORMAT AND EXAMPLE

**QUARTERLY PROGRESS REPORT**  
*for [Time Period]*

**Project Title:** List project name (use same name as approved DAC/FCT Proposal).  
**Candidate(s):** List name of candidate(s), contractor, and country/state of origin.  
**Sponsor:** U.S. <Service & organization> list sponsoring organization that is executing project, POC name and commercial phone number. Two-line maximum, a full address is not needed.  
**Project Manager:** (Name, phone number, e-mail)

**Accomplishments During the Last Reporting Period:**

- State what was accomplished in the reporting period just ended.
- Address any milestone events.
- Do not repeat historical information from previous reporting periods or descriptive project information.
- Spell out all acronyms used first time in report.
- Use bullet statements.

**Planned Actions in the Next Reporting Period:**

- State what is planned for the next reporting period.
- Use bullet statements.

**Issues:**

- Identify and discuss issues to be resolved to allow/enhance procurement potential, state what actions PM is taking
- Identify issues requiring higher HQ help. Identify any potential concerns.
- Identify and discuss cost growths or scheduled delays.
- Highlight any proposed changes to the project baseline.
- If no issues, so state.

**Procurements:**

- Projected or actual procurements in quantity and dollar amount

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Limit Quarterly Progress Reports to one text page; plus a baseline project chart annotated with current project status information.

The project chart should be updated as of the end of the reporting period. Funding actions and completed milestones for the period should be clearly indicated.

**EXAMPLE**

**QUARTERLY PROGRESS REPORT**

*for 4th Quarter FY 96*

**Project Title:** Less Than 3Kw Generator Set

**Candidate:** 2Kw 60 Hz Military Tactical Generator Set; Mechron Energy System, Ltd.;  
Canada

**Sponsor:** U.S. Army Project Manager Mobile Electric Power (PM MEP), AMCPM-MEP,  
LTC Army Guy, phone

**Project Manager:** (Name, phone number, e-mail)

**Accomplishments During the Last Reporting Period:**

- The first option of the sole source contract was exercised for the LT3Kw Gen Set (Mechron Energy System, Ltd., Canada) and consisted of XXX each 2Kw 60 Hz Military Tactical Generator (MTG) Sets (contract #provide number). Delivery of the first production lot and Interim Support Items List components was received in September. Production deliveries will continue through March 1997.
- This first option will equip the Force Package #1 Users with the Mechron 2Kw MTG Sets beginning by 2QFY97. Fielding and Fielding Briefings began in September at Fort Hood and Fort Bragg.
- Mechron conducted new Equipment Training (NET) and Instructor & Key Personnel Training (IKPT) in July at the Aberdeen Test Center, APG, MD.

**Planned Actions in the Next Reporting Period:**

- Fielding will continue at all scheduled sites.
- This is the last Quarterly Progress Report to be submitted on this project.

**Issues:**

- None.

**Procurements:**

A total quantity of over 235 sets could be procured under this multi-year contract over five ordering periods if all options are exercised.

APPENDIX 5  
PROJECT FINANCIAL SUMMARY REPORT FORMAT AND EXAMPLE

## CTO FINANCIAL SUMMARY REPORT.

**Monthly Financial Summary Report:** This report covers the current fiscal year and prior two fiscal years (three years total) and lists the OSD funding provided, the Service allocation, commitments, obligations, and disbursements. This report is for all projects in the given fiscal years and should be reported monthly to the OSD CTO Financial Manager by the Services eight days following the last working day of each month. These will be the actual amounts for actions accomplished to date. The percentage of funds obligated to received, and expended to received, should be included. All projects executing below OSD benchmark should include a brief statement indicating why it is executing below and when it will meet OSD benchmark execution.

**Bi-annual Financial Summary Report (March, September):** This report covers the current fiscal year, previous fiscal year and preceding five fiscal years (seven years total) and lists the OSD funding provided, the Service allocation, commitments, obligations, and disbursements. This report is for all projects in the given fiscal years and should be reported bi-annually to the OSD CTO Financial Manager by the Services on or before 8 March and 8 September. These will be the actual amounts for actions accomplished to date. The percentage of funds obligated to received, and expended to received, should be included. All completed projects with un-liquidated obligations should be identified for proper funds return. The actual amounts must be verifiable within the Services' financial system.

The three items in the next section are reported by fiscal year of the DAC or FCT funds provided.

- Committed: amount distributed and issued to this project. For the purposes of this report, funding need not be de-committed when obligated.
- Obligated: amount charged by contract award, reimbursable project order, approved travel orders, or similar instrument.
- Expended: amount disbursed or accrued. Accruals must reflect actual cost data.

A sample of OSD Obligation and Disbursement Benchmarks are noted in Table C4.T2.

## CTO FINANCIAL SUMMARY REPORT FORMAT

Sponsoring Organization: U.S.  
 Period of Report: MM/DD/YYYY  
 Year of Funds: FY     

<u>Project Name</u> <sup>1</sup>	<u>Project Code</u> <sup>2</sup>	<u>DoD Funding Provided</u> <sup>3</sup>	<u>Service Allocation</u> <sup>4</sup>	<u>Service Committed</u> <sup>5</sup>	<u>Service Obligated</u> <sup>6</sup>	<u>Service Expended</u> <sup>7</sup>
Project A	TN061	1,000,000.00	900,000.00	500,000.00	500,000.00	432,432.10
Project B	TN062	1,500,000.00	1,600,000.00	1,500,000.00	1,000,000.00	987,654.32
Totals <sup>8</sup>		2,500,000.00	2,500,000.00	2,000,000.00	1,500,000.00	1,420,086.42

Sample data for demonstration only.

- 
- <sup>1</sup> List projects by same name used in the Quarterly Progress Report.
- <sup>2</sup> List projects by the project code provided in the Memorandum for PBAS Funds Distribution.
- <sup>3</sup> List, by project, funding provided based on individual service proposal/current DoD allocation.
- <sup>4</sup> List, by project, the funds available to the project management office for ultimate execution.
- <sup>5</sup> List, by project, total funds committed pending obligation.
- <sup>6</sup> List, by project, total funding accepted by activities for performance of services or products, contractual or in-house.
- <sup>7</sup> List, by project, total amount of reimbursable billings and contract payments disbursed, costed or accrued. Accruals must reflect actual costs incurred.
- <sup>8</sup> Totals for projects shown.

Note: All amounts listed shall be cumulative for the applicable fiscal year as of the end of the reporting period.

CTO FINANCIAL SUMMARY REPORT EXAMPLE:

USSOCOM DAC Monthly Financial Report

FY 06 DAC Funding Status

Data as of: 31 December 2006

<u>Project Name</u>	<u>Project Code</u>	<u>DoD Provided</u>	<u>Service Allocation</u>	<u>Service Committed</u>	<u>Service Obligated</u>	<u>OBL %</u>	<u>OSD BM</u>	<u>Service Expended</u>	<u>EXP %</u>	<u>OSD BM</u>	<u>SEE NOTE</u>
SOCOM DAC Program Management	DS061	362,000.00	362,000.00	353,086.00	353,086.00	98%		187,328.00	53%		A
ELINT Reciever	DS601	200,000.00	200,000.00	200,000.00	200,000.00	100%		99,925.00	50%		
Green Light Aiming Laser for SOF Small Arms	DS602	345,000.00	345,000.00	280,000.00	220,000.00	64%		53,262.00	24%		B
Risk Reduction for Specific Emitter Identification	DS603	350,000.00	350,000.00	350,000.00	350,000.00	100%		200,000.00	57%		
CoBRA Intelligence & Information Systems	DS604	700,000.00	700,000.00	700,000.00	700,000.00	100%		659,668.00	94%		
Covert Eyes 3-D Video Camera	DS605	750,000.00	750,000.00	750,000.00	750,000.00	100%		667,287.00	89%		
Portable Tactical Secure Wireless Broadband	DS606	650,000.00	650,000.00	650,000.00	650,000.00	100%		549,546.00	85%		
<b>TOTAL</b>		3,357,000.00	3,357,000.00	3,283,086.00	3,223,086.00	96%	<b>93%</b>	2,417,016.00	75%	<b>64%</b>	

NOTE:

A - GSA returned \$8,914.37 excess funding. It will be made available for Government travel.

B - Activity intends to obligate remaining \$125K by early February, 2007.

APPENDIX 6  
PROJECT CHART FORMAT AND EXAMPLE



## PROJECT CHART FORMAT

### OVERVIEW

The Project Chart is a key management tool for submission of new projects and reporting progress of current projects. The project chart provides a means of monitoring performance and costs. The chart contains, on a single page, the planned and accomplished project actions, the funds execution plan, and the overall fiscal status.

### DEFINITIONS

**Project Chart:** The one-page format lays out the project milestones, funding/obligation plan, expenditures, and status. It is a mandatory part of the proposal and quarterly progress reports.

**Current Project Chart:** Shows current status of the project and will include completed milestones, current Service contributions, DoD authorizations, obligations and expenditures. This updated project chart is required for quarterly progress reports, continuing, and new-start projects.

### PROJECT CHART

DoD 5000.2 states that every acquisition program shall establish an acquisition program baseline (APB) to document the cost schedule, thresholds, and objectives of that program beginning at program initiation. The project chart is our APB and contains three sections to enable easy correlation between actions or events (milestones), funding requirements, and actual financial status. Standardized milestones and financial categories (as listed below) will be used and indicated by quarter. The project chart should not exceed one page. (Use 'Landscape' mode in Excel spreadsheet to ease updating of funding figures.)

- 1) **Milestone Schedule:** As laid out by the proposal, the current milestone schedule will be presented. Shown will be the original (baseline) scheduled dates, any revision to those dates, and actual completed milestones.
- 2) **Funding Profile:** The baseline obligation plans break out expected DAC/FCT project obligations by fiscal quarter. The project chart must reflect 100% obligation of OSD allocation within the FY provided. For example, if \$500K was provided in FY01, we expect \$500K to be shown obligated in the FY01 plan. Actual obligations and expenditures are reported in spreadsheet format and updated for the Quarterly Progress Report.
- 3) **Financial Status:** A summary of the current DAC/FCT project financial status will include requests, commitment, obligation and expenditure data. Financial status information will be reported quarterly with the most up-to-date data available (field data must be compared to official DFAS figures).

### Milestone Schedule

A milestone schedule will be presented by fiscal year and quarter in the project activities section of the project chart. Project sponsors may want to track by month and place

events accordingly, but headers will be listed by quarters on the official project chart. Emphasis will be on defined, measurable milestones, which represent work packages that can be monitored in terms of performance and cost. The milestones shown below are required (indicate N/A if not applicable). Add additional milestones or subtasks and participating organizations as needed to describe project, but keep the chart to a single page. A detailed spreadsheet with "roll-up" totals on the first page is acceptable.

The following symbols will be used (see example chart following).

∇	Original (baseline) scheduled milestone
Δ---∇	Original planned time span
◇	Revised scheduled milestone
σ--τ	Actual start and end dates.
◆	Actual, revised accomplished date
*	See note

### Required Milestones

**Project Approval:** The date OSD notifies the Service that a project will be funded.

- **Initial Funding Received:** The date when funding is first received by the sponsor. For new start projects, this will normally be October.
- **Contract Preparation & Award / Acquisition Agreement / MOU (indicate which):** The date(s) for preparation and formal agreement between the U.S. and the manufacturer / vendor / representative of the item to be evaluated. Milestone may be contract award, loan agreement signing, or similar legal instrument.
- **Test Item Received:** The date when the item will be available for test and evaluation. Indicate on the schedule if multiple items will be received at different times.
- **Test Plan:** The defined period from beginning of the development of the test plan through the date that the approved test plan will be forwarded to OSD. Specify the type of test plan such as "Evaluation Plan," "Test Design Plan," "Detailed Test Plan," "Summary Test Plan," or similar plan.
- **Test(s):** The defined test periods (start - end dates) the item is under testing. The test period should not include slack time such as waiting for a test range, but should include any data analysis time until results are available. Some potential sub-milestones may be: test period(s), test report, safety release operational testing, or testing at multiple sites. If testing consists of multiple phases with decision points between the phases, this should be clearly shown. Testing should address pass/fail criteria as early as possible and should incorporate decision points for project continuation.
- **Evaluation Report(s):** Indicate a milestone when the evaluation results will be available. Note this is not the test report, but the evaluators' position as to whether the item did or did not meet requirements.
- **Decision:** All projects should be concluded with some decision; include a milestone date when that decision will be made. In most instances, this will conclude the DAC/FCT project.

- Closeout Report: The date in which the formal technical closeout (or disposition) report will be forwarded to DoD. (See Appendix 7 for format.)
- Test Report: Final test report date.

### Optional Sample Milestones

Additional milestones may be added, but keep chart to one page. Examples of other potentially important milestones are:

- FedBizOpps Announcement
- Solicitation Release
- Requirement Approved
- Screening Test - decision point
- Early User Test - decision point
- Test Report Distribution
- Type Classification -Limited Production or Generic
- Procurement Contract Award

### Funding Profile

The “Cost Element/Funding Plan” section of the project chart is the obligation plan. Funds execution figures are rolled up in the “funding summary” section of the project chart and tracked against the plan. Funding will be totaled both 'across' and 'down' by fiscal quarter and year. The planned funding should correlate with the planned schedule; that is, cost elements listed correlate to the planned activity shown under project activities. List the organizations receiving the funding. Clearly identify whether the organization is U.S. or foreign government/contractor. List figures to the nearest thousand dollars. List only those items or categories that will be funded by DAC or FCT funding; Service contributions are shown on a separate line. The funding plan must match actual OSD allocations and must reflect 100% obligation of OSD distributions within the FY provided.

Include the following top-level financial categories shown below, even if zero:

- Test Item Acquisition: Include when funded by DAC/FCT Program
- Test Item Integration: Include the cost of modifying test item before test and evaluation.
- Targets, Ammunition or other Government Furnished Equipment (GFE): List cost of U. S. government assets to be consumed or used in testing.
- Technical or Management Support: Activities include contract preparation, contract support services, test & evaluation support, and program decision package development. List sub-tasks. Do not include travel costs on this line.
- Testing: May include all T&E efforts accomplished by testing activities, such as test planning and writing, all test conduct by location and organization, data analysis, and test reporting.
- Evaluation: When accomplished by a separate evaluation activity (not the testing agency), this may include a technical or operational evaluation and will be concluded with an evaluation report. Do not include travel.
- Travel: Travel costs are not to be included in the above lines, but will be listed separately if funded by DAC or FCT Program. List domestic and foreign travel separately. Some sponsoring activities fund all or part of their travel expenses.

- Totals by Quarter: List overall funding requirements by quarter, summing up the individual quarterly requirements.

A detailed cost projection may be attached, but the roll-up funding profile should fit on the single-page project chart.

#### Optional Funding Profile Categories

- Hardware Acquisition: Indicate Purchase, Lease, or Loan
- Contractor Support: Services other than item acquisition; All Science, Engineering and Technical Assistance and Contract Administrative Support Services contract support costs will be listed separately.
- Contractor Training: Equipment training of government personnel in use of item for T&E purposes.
- Logistics Support: Such as a spare parts package or maintenance needed during T&E.
- Shipping: If not included in hardware price

#### Updates

The project chart should always show the completed milestones and actual (lower portion of Funding Summary) obligations for all past quarters. If an expected obligation does not occur, the PM should show that and move the obligation to the new expected quarter in the funding summary section of the chart. The project chart should report incremental amounts for the actions in a given quarter; the past remains constant once the quarter is closed out.

Defense Acquisition Challenge Program - Project Chart																		
<b>Project Title:</b> Ballistic Armor Performance and Comparison Test					<b>Sponsor:</b> US Army PM Comanche					<b>Data as of:</b> 11 March 2002								
		FY 2003				FY 2004				FY 2005				FY 2006				Symbol
Project Activities	Performing Org	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Key
Project Approval	OSD				•													Scheduled
Initial Funding Received	AMXIP				•													Δ Start
Contract Prep & Award	PM Comanche/SA			Δ	▽													▽ Completion
Test Item Received	ARMY(ARL)						Δ											◇ Change
Test Plan	ARMY(RDEC)						Δ	▽										
Technical Test	ARMY(ARL)							Δ	▽									
Operational Test	ARMY(ATEC)																	Actual
Evaluation Report	ARMY(ATEC)																	• Started
IPR Decision	PM Comanche/SA																	◆ Completed
Close Out Report	PM Comanche/SA								Δ									◆ Changed
Tech Data Package	Boeing / Sikorsky					Δ			▽									
Production Buys	Boeing / Sikorsky								Δ			▽						
<b>Cost Elements / Funding Plan (\$K)</b>																		Totals
Test Item Acquisition	Vendor				200													200
Test Item Integration	na		0															0
Targets/GFE	na																	0
Technical Support	ARL						50											50
Test Support																		0
Testing																		0
Technical																		0
Operational																		0
Evaluation																		0
Travel																		0
<b>Totals by Quarter</b>		0	0	0	200	0	50	0	0	0	0	0	0	0	0	0	0	250
	<b>Funding Summary</b>	FY 2003				FY 2004				FY 2005				FY 2006				Totals
	Funds Requested	200				50				0				0				250
	Funds Provided	0				0				0				0				0
	Service Funds	0				50				0				0				50
	Committed																	0
	Obligated																	0
	Expended																	0
	Committed																	0
	Obligated																	0
	Expended																	0
	Committed																	0
	Obligated																	0
	Expended																	0

PROJECT MANAGER SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPENDIX 7  
CLOSE OUT REPORT FORMAT AND EXAMPLE

## CTO CLOSE-OUT REPORT FORMAT

1. **References.** <Reference item requirement, other significant correspondence, and previously supplied test and evaluation reports.>
2. **Introduction and Background.** The purpose of this memorandum is to provide the final closeout report on the <DAC/FCT Project Title> to the Comparative Testing Office. The project manager for this evaluation was \_\_\_\_\_.
3. **Requirement.** <Review requirement for the item, state why evaluation was undertaken. State goal of the DAC/FCT.>
4. **Candidates:** <List names, origin country or state, and contractors of items evaluated.>
5. **Testing.**
  - A. Project was approved and first funded on <date>. Summarize DAC/FCT funding by FY applied to project. Statuses of the funds are: \_\_\_\_% Obligated/\_\_\_\_% Expended (by Fiscal Year). (If either less than 100%, explain and give course of action to achieve 100%.)
  - B. A contract was awarded to \_\_\_\_\_ located in \_\_\_\_\_ for \_\_\_\_\_ test items worth approximately \$\_\_\_\_\_. Contract number was \_\_\_\_\_ and dated \_\_\_\_\_. Test items were received \_\_\_\_\_ and testing was begun \_\_\_\_\_ at \_\_\_\_\_.
  - C. Briefly review testing performed.
  - D. Testing completed on \_\_\_\_\_ and the test report (attachment X) was distributed on \_\_\_\_\_.
6. **Results.** <Review test results against the requirement and pass/fail criteria. Summarize the events of the DAC/FCT. Serve as the permanent final record of the project. Report normally should not exceed four pages and should be written as an executive overview.>
7. **Disposition.** <Was the test successful? Did the sponsor decide to implement or procure the technology or item(s)? Give disposition of test articles after completion.>

A contract was awarded to \_\_\_\_\_ located in \_\_\_\_\_ to implement or procure \_\_\_\_\_ worth approximately \$\_\_\_\_\_. Contract number was \_\_\_\_\_ and dated \_\_\_\_\_. Are follow-on procurements anticipated?
8. **Follow-on Actions:** <Identify implementations or procurements to date resulting from this DAC/FCT by numbers of items and total value. Include contract number to aid OSD in tracking additional implementations or procurements through options. Estimate R&D savings and/or time savings that resulted from this project.>
9. **POC:** For follow-up information on this project.

# **CLOSE OUT REPORT EXAMPLE**

## **CTO CLOSE-OUT REPORT Less Than 3kW Generator**

1. References. ORD 160-135 dated 14 July 1994; FCT proposal; Quarterly Project Reports.
2. Introduction and Background. The purpose of this memorandum is to provide the Comparative Testing Office with the final closeout report on the Less than 3kW Generator Set FCT Project. The project manager for this evaluation was COL Becker.
3. Requirement. The requirement for a Less Than 3kW generator set is captured in ORD 160-135 dated 14 July 1994. The declared obsolescence of existing gasoline-powered 1.5kW generator sets and the absence of gasoline on the battlefield after 1999 combined to create a requirement for a Less Than 3kW generator set that was portable, multi-fueled, and capable of meeting specified power generation requirements. The goal of this FCT was to test and evaluate a non-developmental foreign item that appeared to have the potential to meet the requirements.
4. Candidates: 2kW Generator Set, Canada, Mechtron Energy, Ltd.  
2.5kW Generator Set, U.S., Company A
5. Testing:
  - a. Project was approved and first funded on 1 Oct 1995. The project received \$160K in FY 95 and \$100K in FY 96. We are 100% obligated and expended for both Fiscal Years.
  - b. Contract F08635-97-D-0016 was awarded to Mechtron Energy Systems, Ltd. and Company A for 12 test items at approximately \$5K each. Test items were received in April 96 and testing was begun Apr 96 at Aberdeen Proving Ground.
  - c. Both operational and technical testing was performed. Operational tests were conducted in the field environment at both Ft. Bragg and Ft. Drum. The USMC also conducted Service-unique operational tests at Camp Lejuene and at 29 Palms Marine Corps Base. Technical testing was conducted by TEXCOM at Aberdeen Proving Ground.
  - d. Testing was completed July 96 and the test report was distributed on 1 October 97.
6. Results. All testing supported the manufacturer's data and performance claims. The test results demonstrated that the Mechtron 2kW Generator Set met the U.S. Army performance requirements as specified within the ORD and provided best value over Company A's generator.
7. Disposition. Mechtron test items were retained by the U.S. Army and put into service at Aberdeen Proving Ground in the Ordnance School.



8. Follow-on Actions: The first option to the Mechron contract (insert contract number) was exercised for XXX 2kW Military Tactical Generator Sets . First deliveries took place in September. Fielding of these generator sets to Force Package 1 units at Ft. Bragg and Ft. Hood should occur in 2QFY97. The second option will be exercised next year to meet Air Force immediate requirements. The follow-on options provide the potential for production of XXXX sets for the Air Force, Marine Corps and the rest of the Army. This FCT has saved an estimated \$XXM in RDT&E and 2 years in fielding time. There is a production savings of \$3K per unit procured.
9. POC(s) for follow-up information on this project: Mr. XXXXXXXX

APPENDIX 8  
KAMINSKI MEMO



ACQUISITION AND  
TECHNOLOGY

THE UNDER SECRETARY OF DEFENSE  
3010 DEFENSE PENTAGON  
WASHINGTON, D.C. 20301-3010



MAR 18 1996

MEMORANDUM FOR ACQUISITION EXECUTIVES OF THE MILITARY DEPARTMENTS  
AND USSOCOM

SUBJECT: Foreign Comparative Test Program

Department of Defense (DoD) acquisition practices should encourage competition from U.S. and foreign sources. Defense articles which have completed development require testing prior to acquisition. The Foreign Comparative Testing (FCT) Program provides a process for testing defense articles of foreign countries alongside those of U.S. companies.

When a reasonable expectation of funding for production exists, FCT projects should be undertaken in accordance with the following guidelines:

- The intention to initiate a FCT project followed by procurement should be publicized in the Commerce Business Daily, and full and open competition invited. In addition to outlining the FCT project, the announcement should state whether procurement of the successful candidate article is planned, and in what quantities, and in what time periods procurement is anticipated.
- Sources responding to the announcement should be provided a solicitation that calls for proposals to include the prices for the articles to be tested, and priced options for production quantities.
- Procuring activities may, without further competition and on the basis of the solicitation and the offeror's proposal, contract for production of the successful test article.

*Paul Kaminski*

Paul G. Kaminski



APPENDIX 9  
QUAD CHART TEMPLATE AND EXAMPLE

## QUAD CHART TEMPLATE

<p>&lt;DoD Logo&gt;</p>	<p>&lt;Service Logo&gt;</p>	<p>&lt;Title&gt;</p> <p>&lt;FCT or DAC&gt;</p>																			
<p>&lt;Pictures or Diagrams&gt;</p>	<p style="text-align: center;"><u>Technology</u></p> <ul style="list-style-type: none"> <li>&lt;Description of technology and capabilities (taken from 3-liner)&gt; <u>In Non-Jargon</u></li> </ul> <p style="text-align: center;"><u>The So What</u></p> <ul style="list-style-type: none"> <li>&lt;What is the warfighter impact&gt;</li> <li>&lt;What does success look like&gt;</li> </ul>	<p style="text-align: center;"><u>Participants</u></p> <ul style="list-style-type: none"> <li>&lt;Sponsoring Service&gt;/&lt;Sponsoring Program Office&gt;</li> <li>&lt;Company, Country/State&gt;</li> </ul> <p style="text-align: center;"><u>Schedule</u></p> <table style="width: 100%;"> <tr> <td style="width: 50%;">&lt;Tech/Safety Testing&gt;</td> <td style="width: 50%;">&lt;Q/FY&gt;</td> </tr> <tr> <td>&lt;Operational Testing&gt;</td> <td>&lt;Q/FY&gt;</td> </tr> <tr> <td>&lt;Procurement&gt;</td> <td>&lt;Q/FY&gt;</td> </tr> </table> <p>POC: &lt;Service CTO Name/phone #&gt; PM: &lt;Name/phone #&gt;</p>		<Tech/Safety Testing>	<Q/FY>	<Operational Testing>	<Q/FY>	<Procurement>	<Q/FY>												
<Tech/Safety Testing>	<Q/FY>																				
<Operational Testing>	<Q/FY>																				
<Procurement>	<Q/FY>																				
<p style="text-align: center;"><u>Funding</u></p> <table style="width: 100%;"> <tr> <td style="width: 25%;"><u>Funding (\$M):</u></td> <td style="width: 12.5%;"><u>&lt;FY&gt;</u></td> <td style="width: 12.5%;"><u>&lt;FY&gt;</u></td> <td style="width: 12.5%;"><u>Total</u></td> </tr> <tr> <td>CTO:</td> <td>&lt;\$&gt;</td> <td>&lt;\$&gt;</td> <td>&lt;\$&gt;</td> </tr> <tr> <td>Sponsor</td> <td>&lt;\$&gt;</td> <td>&lt;\$&gt;</td> <td>&lt;\$&gt;</td> </tr> </table> <p style="text-align: center;"><u>Benefits</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>RDT&amp;E Cost Savings:</td></tr> <tr><td>O&amp;S Cost Savings:</td></tr> <tr><td>Procurement Cost Avoidance:</td></tr> <tr><td>Fielding Reduction:</td></tr> <tr><td>Procurement Potential: &lt;Quantity and Total \$&gt;</td></tr> <tr><td>Other Benefits: &lt;Describe&gt;</td></tr> </table>		<u>Funding (\$M):</u>	<u>&lt;FY&gt;</u>	<u>&lt;FY&gt;</u>	<u>Total</u>	CTO:	<\$>	<\$>	<\$>	Sponsor	<\$>	<\$>	<\$>	RDT&E Cost Savings:	O&S Cost Savings:	Procurement Cost Avoidance:	Fielding Reduction:	Procurement Potential: <Quantity and Total \$>	Other Benefits: <Describe>		
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RDT&E Cost Savings:																					
O&S Cost Savings:																					
Procurement Cost Avoidance:																					
Fielding Reduction:																					
Procurement Potential: <Quantity and Total \$>																					
Other Benefits: <Describe>																					

\*After a proposal has been selected for funding and converted to a project, the lower left quadrant will give a Status of the ongoing project and omit the Schedule. Participants can be in either lower left quadrant to the upper left quadrant or lower right quadrant depending on space needed.

## QUAD CHART EXAMPLE PROPOSAL



### **Vaccine and Reagent Refrigeration System (VARRS)**



#### Advanced Systems and Concepts



**Current Refer System**



**VARRS**

**Expeditionary, Life-Saving Medical Storage**

#### Technology

Ruggedized refrigeration system for blood, plasma, reagents and vaccines

Combines proven subsystems for power, insulation, refrigeration, and temperature control

#### The So What

Increase combat survivability by reliably delivering *life-saving* medical fluids to wounded and critically injured warfighters 20 times more reliable than current commercial systems that fail within 90 days in the field

#### Participants

Sponsor: USMC – PM CBRN, Medical  
Gov't Contributors: Naval Health Research Center (NHRC)  
Vendor: AcuTemp, Dayton, OH

#### Schedule

Test Articles Received	4 <sup>th</sup> Qtr FY08
Lab Testing	4 <sup>th</sup> Qtr FY08
Technical Testing	1 <sup>st</sup> Qtr FY09
User Evaluation	1 <sup>st</sup> Qtr FY09
Procurement Decision	2 <sup>nd</sup> Qtr FY09

POC: Ms. Jane Doe, (703) XXX-XXXX  
PM: Mr. J.T. Door, (703) XXX-XXXX

#### Funding (\$M)

	<u>FY08</u>	<u>FY09</u>	<u>Total</u>
CTO	1.060	0.000	1.060
Sponsor	0.357	0.000	0.357

#### Benefits

RDT&E Cost Avoidance: \$10.25M  
Manufacturing Cost Avoidance: \$3.6M  
Procurement Cost Avoidance: \$3.9M  
O&S Cost Avoidance: \$5.784M  
Procurement Potential: 500 systems / up to \$4.5M  
Fielding Reduction: 5 years

# QUAD CHART EXAMPLE PROJECT



## Vaccine and Reagent Refrigeration System (VARRS)

### Advanced Systems and Concepts



**Current Refer System**



**VARRS**

**Expeditionary, Life-Saving Medical Storage**

#### Technology

Ruggedized refrigeration system for blood, plasma, reagents and vaccines

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#### Participants

Sponsor: USMC – PM CBRN, Medical  
Gov't Contributors: Naval Health Research Center (NHRC)  
Vendor: AcuTemp, Dayton, OH

#### Status

Project is on schedule and on budget

POC: Ms. Jane Doe, (703) XXX-XXXX  
PM: Mr. J.T. Door, (703) XXX-XXXX

#### Funding (\$M)

	<u>FY08</u>	<u>FY09</u>	<u>Total</u>
CTO	1.060	0.000	1.060
Sponsor	0.357	0.000	0.357

#### Benefits

RDT&E Cost Avoidance: \$10.25M  
Manufacturing Cost Avoidance: \$3.6M  
Procurement Cost Avoidance: \$3.9M  
O&S Cost Avoidance: \$5.784M  
Procurement Potential: 500 systems / up to \$4.5M  
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